Reframing organisational safety: a multiperspective cultural approach

Langaaker, Lise

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REFRAMING ORGANISATIONAL SAFETY:

A MULTIPERSPECTIVE CULTURAL APPROACH

submitted by Lise Langåker

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ABSTRACT

This work is a safety study based in a cultural and interpretive theoretical framework and in which organisational actors' own safety sensemaking is the focus of research attention.

By the utilisation of ethnographic fieldwork I have explored into the organisational safety structures and safety sensemaking processes in an industrial plant. In this plant, both shared, differentiated and fragmented safety definitions are found to exist, even though the organisational frontstage appearance presents the organisation as "smooth" and streamlined when safety is concerned. Backstage, though, a multiplicity of localised and situated safety constructs exist which may or may not be in line with officially acknowledged frontstage ones and which seldom are heard in open organisational circumstances.

It is suggested that the frontstage safety culture is closely tied to a positive organisational self-perception, and that safety is a dominant organisational theme that promotes organisational unity. Because of this, it is important to sustain the shared frontstage safety culture without noticeable "flaws", and a distinct separation is found to exist between frontstage and backstage safety constructs under normal organisational circumstances. As a rule, backstage ones are kept within their proper "quarters" and do not embarrass the espoused and shared safety culture definitions of the organisational frontstage.

An apparently "strong" and unitary safety culture emerges from this situation. But as this culture is based in the separation of organisational front- and backstages, the polyphony of safety voices does not reach into the organisational open and is seldom acknowledged in organisational safety learning processes. This situation has consequences for safety learning and development as the knowledge base for safety learning thus is narrowed and includes frontstage safety definitions only.

My main conclusions and "recommendations" for safety improvement have three addresses: the organisation in question, the safety community in general, and future

safety research. For all these purposes, I call for an acknowledgment of the multiple voices of localised and situated safety which I believe represent vital – albeit often organisationally unappreciated – safety knowledge for the sake of further safety improvement.

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CHAPTER 1

SAFETY AS A THEORETICAL CONSTRUCT

1.1. Introduction.

My theme of research is to investigate into the concept of worker safety.

The theoretical perspectives I will utilise in my safety research are not the ones to be commonly found in safety research literature. As a prelude to my work, I will give a brief sketch of my motivation for becoming engaged in safety studies. This "tale" will hopefully illustrate why I choose to consider safety through the analytical perspectives I have settled for:

In 1992 I became employed at a small college which at that time predominantly was an engineering college. This college had national responsibilities in teaching and doing research with a focus on safety aspects. Safety was to become the trade mark of the college, and all students were to be knowledgeable about various safety aspects of work life by the time of their graduation. This organisational policy was a challenge to me as one of the organisation theory lecturers, as I was to provide organisational safety knowledge to my students, and as I did not have the faintest clue as to what this was all about. (I later found that a college is not exempted from the organisational tendency of discrepancy between espoused theories and theories-in-use (Argyris and Schön 1978): No one really expected me to care much about safety, as safety was defined to be an engineering issue, and organisation theory was not perceived to be of much relevance within this technical world view. On the contrary, organisation theory might even be counterproductive to the credibility and market value of safety teaching and research with its analytical perspectives and its lack of straightforward answers. But when I discovered these organisational preferences, I was already hooked on organisational safety research.)

To construct my own safety knowledge, I started to read safety literature, I attended safety conferences and meetings, I visited national safety experts at universities, and I had a placement period at a local industrial plant to get an impression of how safety was handled in the "real world". What soon became evident to me was that organisational perspectives were next to invisible in the safety research I came across. The focus seemed to be upon risk analysis, key safety figures, technical solutions for safety improvement, psychological aspects of individual motivation and learning - and at times something fuzzy called "safety culture". In numerous company presentations of their safety work it was referred to the "safety culture" of the company as a main tool of improving safety, and in applied research this was accentuated likewise: Not infrequently I found a call for and sometimes also prescriptions for the creation of a "positive safety culture".

Based in my interest in organisation theory, I became frustrated by what seemed to me a somewhat superficial and tool-oriented way of utilising the concept of organisational culture. The culture concept was seemingly brought forward as an almost magical issue which was used rhetorically in both safety discussions and safety research. As did Cooper (1998), I wanted to question the common utilisation of the concept and to fill it with substance rather than with thin air. I felt that the concept of culture was being "ruined" in the rather fluid ways it was being handled, and I disliked this since I had a strong notion that a cultural framework had the potential for illuminating how organisations cope with worker safety. Gherardi and Nicolini (2000a) echo this view of mine when they comment upon how the term "safety culture" often is used in such a vague and reductive sense that it threatens the concept's potential. As a result of these concerns, it became my research intention to attempt to realise what I considered to be the culture concept's true potential in safety research.

This research work then is thus motivated by what I perceive as a need to broaden and reframe the perspective of safety research by basing investigative endeavours in a cultural research paradigm. And in case it may look like I am the only one who has been occupied with such thoughts about safety: This is by no means the situation. My work finds its place within a tradition – if yet small but growing - of

safety research in which cultural, contextual and perceptional approaches to safety studies are incorporated (e.g. Gherardi et al. 1998a; Gherardi et al. 1998b; Thompson et al. 1998; Waring and Glendon 1998; Rundmo 1997; Williamson et al. 1997; Hofmann et al. 1995; Janssens et al. 1995; DeJoy 1994; Guest et al. 1994; Hovden 1991). The social production of safety conditions seen within the perspective of a cultural approach is a theme of study that is met with increasing interest among scholars (Gherardi and Nicolini 2000a).

1.2. The structure of my work.

I have chosen to do a study of the safety work in a Norwegian industrial plant. My work is structured as follows: Section A describes the basic assumptions and frameworks of my research. In chapter 1, I look at safety in organisations from a theoretical perspective, outlining and discussing different perspectives which sets the scope for my theoretical endeavours. The purpose of my study will also be outlined in chapter 1. Chapter 2 is where my research methodology is discussed.

In section B I turn to my fieldwork site, MAIE. In the sole chapter of the section – chapter 3 – I introduce the plant, and I give an overview of the nature of work hazards. Lastly, I give an account of how I carried out my data collection and interpretative work.

Section C is where my main data material appears. In chapter 4, safety history is described as seen through the eyes of organisational members. The role of the historical accounts in present-day safety perceptions is emphasised, and the existence of a distinct safety identity is discussed. Chapter 5 is the one in which I present the bulk of my data material. Guided by the formal structure of the safety work, I describe organisational members' interpretations of the different aspects of the organisational safety work. I end the chapter with a discussion of the formal safety structure and organisational meaning construction.

The last part of my work, section D, consists of three chapters, and this is where my main analysis takes place. Chapter 6 deals with the safety ideology, and in chapter

7 I analyse the safety culture as a shared, differentiated and fragmented culture. In chapter 8, I establish what I consider to be my main local knowledge by focussing my conclusions around five issues: Safety as multiple interpretations, front- and backstage safety, safety culture and identity as dominant organisational traits, safety learning and development and, finally, MAIE as a "strong" safety culture. In my final "recommendations" and remarks, I discuss my findings from three perspectives: What implications they may have for MAIE, for organisational safety in general and for further safety research.

The backbone of this thesis is the multiple safety perceptions that have been revealed to me by organisational members in the course of this work. Thus, my data material will have a prominent role in the forthcoming thesis. I will produce thick descriptions (Geertz 1993b) of the safety reality as seen from organisational members' points of view, and I will analyse these perceptions from different theoretical angles. It is my belief that this data-focussed approach will enable me to depict and comprehend MAIE as a safety organisation in ways that shed light upon multiple facets of the safety reality.

1.3. Risk and safety as societal concepts.

According to Habermas (quoted in Røvik 1998), science and technology constitute Western societies' dominant ideology, and the concept of an almighty God is being replaced by that of science and rationality as a belief system in which we put our faith for human progress. This societal "state" - called the era of Modernity - may be described as a product of the Enlightenment and focusses on rational scientific knowledge to explain and further develop human society (Carter and Jackson 1993). Based in this societal analysis, it is not a coincidence that the body of safety research is growing and that the concepts of risk and safety are becoming prominent features within societal debate and ideology - at least in the industrialised countries in the Western part of the world. To control risk and to achieve safety have become predominant societal themes. Beck (1997) argues that risk has become a root metaphor of our Western society, and consequently, issues regarding risk perception

and preventive safety measures have achieved a dominant position in societal and individual thought.

According to Beck (ibid.), though, modern society with its belief in everdeveloping projects of scientific progress has experienced events that makes evident the limits of scientific control over human circumstances. Catastrophes like Bhopal, Tsjernobyl, and Estonia remind us about this. And gradually occurring catastrophes like deforestation, climate changes, acid rain, etc. are grave warnings of industrial societies' neglect of the environment that human beings depend upon for a continued existence. Modernity's ideology of progressive development based upon scientific control has become questioned by large segments of people, and contrary to what was the case 30 years ago when modernity critique took place in small and "outcast" groupings, doubts of the future societal prospects can be heard over a broad scale. A questioning of larger and smaller scale disasters in spite of - and even because of - scientific progress and rational knowledge has entered the legitimate agenda of public concern and debate, and multiple perceptions of risk have surfaced as a widespread societal phenomena.

Beck (ibid.) claims that the illusions of Modernity have become shattered and are being replaced by a reduced faith in the possibilities of science to create the ultimate nirvana. But instead of a fundamental critique that strives to substitute Modernity by radical means, Western man and woman are occupied with how best to avoid the inevitable negative consequences of the modern way of life. Resulting from this, risk analyses, safety equipment, safety systems, etc. flourish both in work organisations and in society at large, and a growing risk and safety market has become a niche of entrepreneurship both in business and science. A world view which is strongly influenced by risk and safety deliberations can daily be witnessed in Western media as postmodern Risk Society manifests itself and the balance between risk and safety is tried to be held in check.

The gradual development of risk awareness and the fact that it primarily is an issue of broad concern in the Western part of the world indicate that "risk" is constituted in a political and social process. What is perceived as risks and what is not

perceived as risks are political questions based in social constructions and not objective facts derived from valuefree scientific knowledge, and each specific social setting develops its own definitions of risk and safety (Gherardi and Nicolini 2000a; Douglas 1992). According to Douglas and Wildavsky (1982), emerging risk perceptions either become accepted and ranked on the societal risk agenda or are refused admittance to the agenda through a political process. To achieve a prominent ranking, risk perceptions need to be promoted by powerful agencies and individuals that are competent political actors. If this is not the case, risk perceptions continue to be minority perceptions only and may be labelled as irrelevant.

The emergence of risk perceptions and the development of safety systems at societal level are analogous to the ways risk and safety conceptualisations are developed in work organisations. The organisational risk and safety situation becomes manifested through a political process which is influenced by both external and internal factors. National regulations will contain prescriptions for risk and safety handling, and within this framework, organisations will construct their own risk pictures and their approaches to safety work. Organisational actors will to differing degrees be able to get their risk and safety definitions accepted as "the" organisational risk and safety issues. As a result, it is probable that some groups' and individuals' risk and safety perceptions will be labelled as relevant and important and others' will be labelled as irrelevant.

1.4. Safety in the rational and modern organisation.

Czarniawska-Joerges (1993) talks about rationality as the main metaphor of organisations: It is towards the state of rational action that organisations continuously strive. She discusses rationality as a dominant organisational value which most often is taken-for-granted and thus unquestioned by organisational members. The recipe for organisational success is believed to lie in rational action, but what may be lacking, is the competence to act according to this knowledge. Based in this belief system, it ought to be no surprise that safety as an organisational phenomenon is considered an area that may be successfully handled by rational and

logical problem solving methods. In accordance with this perspective, the overwhelming bulk of safety literature has a descriptive and applied character, promoting different methodologies for the improvement of organisational safety. The suggested methods differ in their emphasis, and they may concentrate their safety advice around technical, housekeeping, managerial, motivational, training related, or what is termed cultural issues (e.g. Dufort and Infante-Rivard 1998; Krause 1994; Krause and Sloat 1993; Wilpert and Qvale (eds.) 1993, Blockley (ed.) 1992; Tungland 1992; Saksvik 1992; Clementsen and Haukelid 1991; Krause et al. 1990; Rundmo 1989; Nicolaysen and Svarva 1986). This "technical" and normative route to safety (Gherardi and Nicolini 2000a) seems to be highly predominant in the existing safety literature. I find it of small relevance for my study theme to go into an extensive reviewing of this safety literature as the cited works - and others within the same tradition - have had no great impact on my work due to my choice of a different approach to organisational safety issues.

Krause et al. (1990) may be cited as an example of a way of thinking about work safety which is not uncommon within this tradition. They develop what is called "The Behaviour-Based Safety Process" in a model where assessment and implementation are focussed. Included in the assessment stage is behavioural analysis of accident reports, assessment reports, statistical analysis of injury data, the establishment of steering committees for decision-making and information and the selection and instruction of trainers. The implementation stage contains the construction of inventories of critical behaviours and training programmes, the systematic utilisation of observed data, information schemes and several other implementation strategies (ibid., p. 54).

What is to be noted here – as in a other models for accident prevention - is that the focus is on data collection, an analysis of accidents and their perceived causes and a programme for information and training. The design of bureaucratic safety systems is a dominant trait in much applied safety literature (Gherardi et al. 1998a), and such systems will often consist of written procedures for work behaviour, reporting procedures for accidents and unwanted events and other safety routines. A "checklist logic" is the dominant safety perspective (Gherardi and Nicolini

2000a:13), and it can be argued that bureaucratic systems (Weber 1947) are key aspects in the development of organisational safety activities for the promotion of safety effectiveness.

It is believed that through systematic work routines, the utilisation of specific procedures for accident data collection and accident investigation - all in combination with proper information and training -, it is possible to forestall work accidents to take place. And in order to integrate what in safety programmes commonly is called the "human dimension", issues of motivation, communication and worker participation are often included in safety improvement models. A dominant organisational belief seems to be that safety issues can be planned and implemented in rational and predictable ways if training and information systems are functioning and employee motivation is present. "Good" safety is looked upon as compliance with safety regulations, and this "bureaucratic vision of safety" (Gherardi and Nicolini 2000b:343) initiates continuous refinements of the existing safety behaviour models as well as it causes a focus upon rule compliance rather than safe behaviour (Lawton 1998). Nonconformity with the prescribed logic - "irrational action" - will in this framework be accounted for as deviant human behaviour (Schutz 1967) which can be corrected by increased competence, improved planning, more information, higher worker motivation, etc.

Within this framework of thought, safety is seen as confined to its "enclosure" of safety programmes as a problem area which successfully can be "attacked" by appropriate problem solving tools. This safety world view is in line with an organisational perspective which considers organisational reality to be streamlined and logical and which believes in controllable organisational processes. Seen within this perspective, the existing models of safety improvement are reasonable and relevant. Even though it is also admitted that safety work is demanding, this does not seem to be so because of any perceived default of the existing safety improvement tools as the safety models are considered to be logical and seemingly not open to much reflection and doubt. If employees worked according to procedures, if they were sufficiently perceptive of training and information systems, and if they were active in the utilisation of safety reporting systems, then

organisational safety efforts would be successful, it may be claimed by managers and safety experts alike.

It is my intention to study organisational safety from perspectives that view organisations as less streamlined and less rational than that which is displayed here. Therefore I must turn to other research traditions where I can find theoretical support for my forthcoming safety analysis.

1.5. Post-modern - and other - critique of the rational and modern concepts of organisation and its consequences for my research.

Some of the critical voices of organisations as rational and streamlined entities are termed post-modernists (e.g. Hassard and Parker et al. 1993; Reed and Hughes et al. 1992; Hassard and Pym et al. 1990). What I perceive as a general focus point of post-modernism is a fundamental critique of a "grand narrative" concerning society and organisations in which rationality rules and most issues are smooth and simple - or could be if conditions were not messed up by irrational human actions.

Post-modernism thus contests what is seen as images of conformist, plain and unified organisations. Morgan (1990) opposes what he perceives as traditional research's belief in organisational instrumentality and linear processes, and Harvey (1989; quoted in Brown 1992) echoes this when he talks about the rational paradigm's belief in absolute truths and planning of ideal situations under standardised conditions of knowledge and production. Burrell (1989; quoted in Alvesson and Berg 1992) states that post-modernists share a mistrust of the notions of rationality, truth and progress. According to Czarniawska (1997), a quest for coherent theory has led to the neglect of organisational paradoxes, and the dominant "rational madness" (Doray 1988; quoted in Brown 1992) of organisation theory thus has to be opposed as unity and integration is not what typifies organisations, but rather ambiguity, confusion, dynamic processes, differentiation, and complexity. Brooks (1997) claims that the only truth to be found in organisational life is interpretations and social constructions of reality. Seen from a post-modernist perspective, then, the continuous research attempts to "force" organisational life

into pre-conveived analytical categories of unity, rational order and integration might be termed "intellectual imperialism" (Reed 1993).

Merton (1968) has long ago pointed to the dangers of bureaucratic systems becoming goals in themselves rather than being means of organisational effectiveness, and Brunsson (1989, 1985) questions the functions of many logically and rationally perceived organisational tools. He suggests that many of these might be looked upon as ritual activities in order to sustain the stronghold of rationality as a main organisatonal metaphor. "The politics of rationality" - the continuous endeavours to support rationality's central position – is carried out by organisational routines where meetings, planning, statistical measurements, etc. become symbols of the rational order (Czarniawska-Joerges 1993).

If organisational processes are less streamlined, less predictable and less rational than often is considered, then organisational research has to utilise perspectives that are better suited to catch the complexity than more traditional approaches. Research attention has to be transferred from simplicity and consensus to complexity, plurality, and possible controversy (Reed 1993). Ambiguity has to be accepted as intrinsic characteristics of what happens in organisations (Brooks 1997), and incommensurability and "non-logical" actions will have to be investigated. The refusal of modernist research to see the complexities of organisations and to be open to aspects that do not "fit" into the "proper" framework of thought (Linstead et al. 1996) has to be overcome. To the contrary, what has to be valued in research seen from this perspective is the cacaphony of organisational voices that exist in any organisation.

Organisational processes have to become central issues of research concern. The frequently elusive flow of organisational processes with their interactions, actions, discussions, etc., constitutes an "order" in the organisation that may stand in opposition to - or be equivalent with - the formal order of the organisation as espoused in procedures, regulations, and organisational visions. A focus on the informal as well as the formal organisation will be a consequence of this perspective of organisational research.

"Grand narratives" and stringent theories are looked upon with great scepticism within the post-modernist tradition. But post-modernists' insistence to focus upon the fragmented state of organisations may be looked upon as the creation of yet another "grand narrative" - a paradigm in opposition to the rational one, but still a paradigm that claims to incorporate general truths, and thus essentially not so very different from the paradigm of science that post-modernism criticises. When considering this potential contradiction of post-modernist critique, I see that the danger of becoming a "neo-imperialist" is not an unlikely possibility for ardent post-modernists. Included in much post-modernist critique, though, is a consciousness of becoming new "empire constructurs", and reflection about own theoretical stances is emphasised. This awareness will hopefully prevent researchers that are influenced by post-modernist thought from constructing new organisational "grand narratives". The research will instead be concentrated on the creation of "local" and "multiple narratives" based on the knowledge it is possible to establish from specific organisational situations. Such research may be quite frustrating both for researchers and an audience who are socialised into the scientific world of clarity and causal explanations, and the post-modern paradigm will naturally become the target of criticism due to its radical departure from basic principles in the dominant scientific discourse.

The post-modernist evaluation of the possibilities to gain organisational understanding bothers me. I have so much "scientific belief" engrained in me that I believe in the possibility of being able at least partly to "understand" organisations. If I were to look upon my research efforts as primarily the collecting of small bits and pieces of organisational "snapshots" without the possibility to find links between organisational phenomena, then I would not see much sense in doing this work. I believe I will be able to establish some organisational knowledge, but what I am aware of, though, is that the knowledge I produce has its limitations. Post-modernist thought has convinced me to try to avoid overcertainty in my forthcoming organisational interpretations. I will probably not succeed in this without failure and struggle as I am socialised into a tradition where clear answers are held in high esteem, though.

Actors' own categorisations of their organisational realities will have to be of imperative importance in my research, and this perception of research - emic research in opposition to etic research with its focus on pre-conceived theoretical concepts and categories - will necessarily create a research process that is different from more traditional research processes. Only in a "bottom-up" and emic way of doing research will I be able to catch the polyphonic organisational life that post-modernists emphasise so much.

I will furthermore have to abandon my ambitions of being able to interpret an organisational totality and be satisfied to produce knowledge within fields of the organisational reality. It feels somewhat painful to state this work objective as it feels much less glamourous than having the ambition of a holistic understanding of organisational phenomena. "My" organisational knowledge will be less simple, less streamlined and less "practical" (Alvesson 1993) than traditional safety research, but this somewhat fragmented approach will create space for processes that cannot easily be categorised and compartmentalised and which under different research paradigms probably would be excluded from research considerations.

I see the practical utility of my research in the way I will include ambiguity, lack of coherence and clear answers. It is my conviction that it would be of practical use for organisations to include similar concepts in their safety efforts in order to understand their safety realities in diversified ways. Alvesson and Berg (1992:177) talk about the provision of "... knowledge foundations for a comprehensive and perceptive understanding of conditions, situations and mechanisms which influence and can influence actors in organisations". Such understanding will enable organisations to act on the basis of wide organisational knowledge, and although complex knowledge may be difficult to relate to, I believe that the potential for improved safety action lies inherent in varied and comprehensive knowledge.

It is my conviction that much existing safety research tend to be too "straightforward" and narrow and is thus not able to cope with the complexity of organisational safety. I suspect that many everyday events which are vital for worker safety are not given sufficient consideration in traditional safety model

thought. For instance, worker behaviour that ignores existing safety regulations is frequently merely classified as "wrong" behaviour, and it seems to be believed that with further information and training, such behaviour can be avoided in future. It seems also to be assumed that employees will not let themselves be influenced by "improper" phenomena as personal feelings, individual perceptions, nonconform opinions, organisational dissatisfaction, etc. in their safety performance. There is not much room within existing safety literature for a further exploration into what might constitute the causes of "deviant" behaviour and safety rule neglect, and there is seemingly no room for the inclusion of the multiple safety constructs which probably exist in organisations. This lack of reality definitions to supplement the official one(s) is in my view a very questionable aspect of safety research both from a safety improvement and an ethical point of view, as the multiplicity of organisational safety definitions concerns the well-being of organisational actors in a significant way.

I appreciate that it is an organisationally demanding task to consider safety questions in the sense that I have outlined, and I do not argue for the obliteration of systematic and "rational" safety programmes and systems. Many fatal accidents and serious health damages undoubtedbly have been avoided due to such safety efforts. What I argue for, though, is a widening of the scope of safety thought to include more elements of organisational life than it seems to do at present. Employees have to become accepted as organisational actors with often differing safety perceptions of "what it is all about". The acknowledgement of a multiplicity of subjective safety rationalities is needed in order to reach organisational safety goals.

1.6. A summary of the purpose of my study.

As a consequence of my cited theoretical deliberations, I want to base an exploratory study of worker safety in a framework of thought that extends that of a rational analytic approach to organisations. It is my intention to do a safety analysis which focusses around organisational actors' own perceptions of their safety reality. Through this emphasis on multiple interpretations it will become possible to

establish and analyse an organisational safety reality which takes into account a complex web of visible, hidden, "rational" and "irrational" safety representations and enactments.

This safety plurality will be analysed and conclusions will be drawn as to what seems to constitute basic traits of a specific industrial plant's safety organisation. "Local knowledge" (Geertz 1993a) will thus be at the centre of my attention, and "local theory" – heuristically developed rules of practice which people use to make sense of their work situation (Bartunek and Louis 1996) – will become visible.

The construction of generic theory is not the objective of my study. Like Brooks (1997), I do not seek to offer the *answer*, but rather give some *insights* in a complex world. Geertz (1993b:28 – 29) tells the story about an Englishman who is in India and has been told that the world rests on a platform which rests on the back of an elephant which in turn rests on the back of a turtle. When he asks what the turtle rests on, the answer is: "Ah, Sahib, after that it is turtles all the way down". As I set out to do a study that acknowledges multiplicity and organisational complexity, I suspect that this work of mine will be a continuous search for ever new insights – for turtle upon turtle upon turtle without ever being sure about which is the bottom one.

I have no illusion as to find the "full truth" about worker safety, but what is an objective and a main goal is to try out whether my theoretical framework for studying organisational safety enables me to come forward with issues concerning safety and safety organising that rarely are being considered in safety research literature. It is my hope that my chosen approach will prove to be beneficial for the development of new aspects of safety knowledge and further improvement of worker safety.

1.7. Safety as mundane processes.

Garfinkel (1967) argues for the necessity of taking the mundane and the common into strong consideration in organisational research. He points to what he considers

a frequent research neglect of everyday affairs and a devaluation of actors' own interpretations of work life events. Organisational members' main construction of meaning takes place during everyday events, Garfinkel argues. Colville et al. (1999) state that mundanity in organisations always has been the aim of management since it promotes periodic stability and organisational consolidation. With reference to Peters and Waterman's (1982) bestselling book, they claim that organisational excellence is about "searching for and exploiting mundanity" (p. 136). Seen from the perspective of safety research, Garfinkel's as well as Colville et al.'s arguments lead to a focus upon mundane work practices and safety routines and organisational actors' reflections upon these.

A focus on work practice and workers' points of view is also emphasised by Alvesson (1993). He asks for an on-the-job perspective and expresses worry that symbolic events are overly emphasised in cultural research. According to Turner (1992), the taken-for-granted actions of work life are manifestations of knowledge that may or may not be part of people's cognitions, and a focus on daily actions is thus imperative in order to investigate into how people make meaning in organisations. Wright (1994) as well as McNulty (1994) also emphasise a daily and mundane focus when discussing people's interpretive processes. Czarniawska-Joerges (1993) claims that organisational culture is primarily created and maintained in mundane work actions, and Leidner (1993) echoes this view when he states that work identities are shaped by people's specific work tasks.

A discussion of practice and its inherent tacit knowledge – which becomes manifested in situations when rules governing performance are "forgotten" because they are taken for granted (Gherardi et al. 1998a) – is elaborated by Schön (1991) and Smircich and Stubbart (1985). It is argued that practitioners usually have more knowledge concerning their work situations than they verbalise, and routinised actions in particular are embedded in much intuitive knowledge. Frequently, internalised rules of the thumb are utilised rather than conscious deliberations and selections of action modes (Etzioni 1987). Holland and Quinn (1993) talk about the importance of folk theory – informal commonsensical deliberations developed into a cognitive schema through experience and social interaction – as a supplement to

or in opposition to the expert and more official schema for behaviour in organisations.

When following these lines of thought, it becomes vital to investigate safety from a daily and mundane point of view as organisational members' safety interpretations and safety improvement suggestions primarily will take place during work tasks and ordinary safety routines. The safety culture "in work" needs to be emphasised in a safety culture analysis which hopes to capture the culture beyond its official and often spectacular surface.

1.8. A need for a specific theoretical framework for safety research?

This is a question of significant interest when venturing into safety research. I will answer it nonhesitantly with a "no", although I at many stages during my research process has been less certain than I am now.

My doubts have been grounded in the emergence of specific frameworks and conceptualisations for the study and application of safety in organisations (e.g. Cooper 1998; Glendon and McKenna 1995; Wilpert and Qvale (eds.) 1993; Blockley (ed.) 1992; Krause et al., 1990). Such specific safety models and research tools seemed to be productive for safety analysis at first glimpse, but by second glimpse I found that they lacked what I consider vital perspectives of organisational analysis. Within the "tool chest" of the general theories and concepts I have already outlined – and those to come – I find more helpful theoretical perspectives and conceptualisations to do an analysis of organisational safety than I have found in the more specific safety literature.

Consequently, I do not think there is any need for the elaboration of safety related theoretical concepts as e.g. "safety culture" which some researchers argue the necessity of (Hovden 1991). Since there is no reason to believe that safety culture is fundamentally dissimilar to other organisational cultural phenomena, an investigation into safety culture will have to be founded in the concepts and approaches of general culture analysis. I follow Kunda (1992) when he questions

the continuous creation of new concepts "for the same old story" (p. 242) which he argues frequently is done in organisational research. The challenge for me is the productive utilisation of already existing perspectives of organisational research. If I am able to analyse organisational safety within the theoretical frameworks I have chosen, I will be in no need of any specific safety approach in my analysis.

1.9. Safety as social constructs.

1.9.1. Organisational actors' safety sensemaking processes.

Several researchers have developed theories about how people make sense of what takes place in their organisations and how they construct their own social realities (e.g. Weick 1995; Silverman 1970; Berger and Luckmann 1967; Schutz 1967; Goffman 1959).

Through cognitive processes, organisational members attribute meaning to events - they interpret and they author, they discover and they create meaning according to Weick (1995). Morgan (in 1990) focusses on individuals' actions as rational events within their interpretation of their social reality, and he states that constant negotiations and renegotiations with others form the basis for their perceptions and actions. Porac et al. (1989) argue that individuals interpret their worlds by linking new cues with well-learned cognitive structures, and Isabella (1990) points to the constructs' perpetual changes as new situations arise and new questions are being asked. Geertz (1973; quoted in Weick 1979) says that "man is an animal suspended in webs of significance he himself has spun" (p. 135) and thus points to the paradox of humanly created meaning structures becoming mental "prisons" for the same humans who created them in the first place.

Weick (1995) states that sensemaking and organising have much in common by being processes in which order is imposed and simplification, comprehension and connection are offered, while Reed (1992) points to how interpretations, negotiations and interactions either sustain the precarious and unstable sense of

organisational reality or work to transform the organisational situation by new interpretations and innovative interactions.

Within an organisation there will exist different frameworks for organisational meaning construction. Through cognitively developed schemas – mental maps or frames of reference which consciously or unconsciously guide individuals' categorisations and interpretations of events (Isabella 1990; Stubbart and Ramaprasad 1990; Harris 1996) – different organisational members and groups will organise events and make sense of these according to prior experience and learning (Holland and Quinn 1993).

An awareness of the existence of different interpretive schemas is needed in order to understand organisational reality construction. What is also to be noted is that meaning constructions often simultaneously will be varied and shared between organisational members (Fiol 1996), and organisational consensus and fragmentation thus will be parallel occurrences. It is proposed (ibid., p. 179) that unified organisational diversity is achieved when organisational members in spite of multiple interpretations share a framework of thought – a general organisational schema – which is broad enough to encompass the differences. Such a unifying framework is considered important for organisational action. Porac et al. (1989) echo this view when defining consensus as a set of core beliefs within a group but around which there exists many variations in perceptions.

Weick (1995) discusses the concept of shared meaning in organisational sensemaking, and he argues that this state is difficult to attain. What often can be observed, though, is a situation of organisationally shared – identical – experience leading to unshared meaning. According to Weick, a way of coping with this is to avoid summarising or labelling the shared experience and instead accepting the shared experience for what it is, leaving the collective sensemaking alone.
On the collective level, Smircich and Stubbart (1985) talk about the organisational "drama" which is enacted through interactions between organisational actors, and they argue that it is through these enactments that "organisation" is established, sustained, and gradually changed. Organisation can be viewed as a stage scene

where acting individuals perform and construct meaning (Lyotard quoted in Harvey 1992). Mangham and Overington (1987) also utilise a theatrical metaphor when they argue that what occurs in organisations is a matter of performance. Seen from this point of view, organisational actors continuously stage performances according to their organisational roles. And it is through this acting that organisational reality is shaped: "Performance, as a concept drawn out of theatre, implies what is happening is a matter of creating realities ..." (ibid., p. 102).

A way of handling a shared experience/unshared meaning situation (Weick 1995) is by the development of backstage and frontstage communities or regions (Goffman 1959). These concepts are utilised by Goffman when he explores the theatrical metaphor in order to analyse human behaviour in social situations. He defines frontstage performances – which are meant for relatively open audiences – to be efforts to give an appearance of maintenance and embodyment of certain standards (ibid., p. 107). In backstage regions, though, the audience is limited and a "guarded passageway" is present, and thus, the backstage region is kept closed and hidden to members of the general audience. Here, "... the performer can relax; he can drop his front, forgo speaking his lines, and step out of character" (Goffman 1959:112), and she can safely do the kind of things that ordinarly result in negative sanctions (Goffman 1963). What is developed is a frontstage and a backstage language of behaviour (Goffman 1959:128).

What we find both in frontstage and backstage situations is "... a team of performers who cooperate to present to an audience a given definition of the situation" (ibid., p. 238). It becomes a vital point to keep the frontstage and backstage audiences separated from each other as confusion and threats to the credibility of the performers will arise if this is not the case. If such a mix-up of audiences takes place, the performers will find themselves torn between two realities with two sets of rules of behaviour, and according to Goffman (ibid.), organisational embarrassment is almost certain to result. Therefore, the multiple realities of organisational actors must be kept separated.

When bringing these concepts into organisational analysis, what can be seen is that actions and sensemaking processes which are deemed legitimate for open attendance by broad audiences occur in the organisational frontstage region. Organisationally shared experiences (Weick 1995) will occur frontstage, and shared meaning – emphasising organisational coherence and effectiveness - will be constructed and promoted through officially espoused theories (Argyris and Schön 1978). But organisations also have their backstage communities where membership is restricted and where participation in actions and sensemaking processes is reserved for members. Backstage, organisationally shared experiences may give rise to unshared meaning constructs as organisational members interpret their experiences in ways that may differ from what is done in frontstage situations. Theories-in-use which are different from the espoused theories (Argyris and Schön 1978) will become apparent in backstage arenas. A summarising and labelling of shared experiences resulting in unshared meaning thus may take place in organisational backstage environments as the language of behaviour is different there from that of the frontstage and as maintenance and embodiment of the frontstage standards are not necessitated (Goffman 1959). But it is crucial to keep these different organisational regions separated since the different rules of behaviour will make for organisational embarrasment if the boundaries between them becomes blurred (Goffman, ibid.).

The subjective definitions of organisational situations are by researchers within the phenomenological research tradition valued as the most essential data when doing organisational analysis as the individual sense making process is looked upon as the nucleus in the socially constructed organisational world. If one is to catch the process of organising in which people construct their organisational realities, then descriptions and evaluations from actors' own points of view become a clue for organisational research (Blumer 1986).

When following these lines of thought, it can be stated that organisational members' perceptions of safety are socially constructed phenomena. Organisational actors will over time construct diverse safety realities built upon differing interpretations of organisational events and the existence of differentiated safety experiences.

People will attach meaning to their work situations as to what is safe and unsafe work behaviour, and they will construct their own interpretations of organisational safety policies and safety efforts by applying the same interpretive mechanisms as they do regarding other spheres of organisational life. Different safety schemas will be found within the organisational safety reality, and accordingly, different attributions of the same safety events will occur as organisational actors make sense of their safety related world (DeJoy 1994). Safety becomes a differentiated and situational concept.

What thus becomes necessary in safety research is to widen the scope of approach to include multiple constructions of safety realities in both analytical research and applied suggestions for improved safety. The safety perceptions of acting safety practitioners need to become focussed (Rundmo 1997; Hofmann et al. 1995). Safety constructs are developed in a situational context which is influenced by technology, the interactional and social environment, managerial decisions, the specific work procedures of the organisation and other aspects of organisational life. Thus, people's safety constructs are complex and often ambiguous, and they are continuously changing. Employee safety perceptions are never static, and they are seldom exact copies of managerially defined safety issues. According to Thompson et al. (1998:21), employees' perceived sense of workplace safety might be a better indicator of safety risk than routine reports and other information available to management. The complexity and ambiguity of safety perceptions have to be vital aspects of safety research if one is to catch the dynamics of organisational safety development (Douglas 1992).

Subjective rationality will be at the core of all individual decision processes, and this rationality has to be a matter of serious concern in safety analysis. If organisational members behave unsafely, the chances are strong that they themselves will be the ones to suffer. Still, there are numerous examples of how workers act contrary to safety regulations. Employees may routinely use safety short-cuts and adopt these as their standard operating procedures or they may choose not to follow the designated safety procedures at all (Hofmann et al. 1995:131). Donald and Canter (1993) state that accidental behaviour sometimes is

quite intentional in the way that people know they are acting unsafely but nevertheless do it. In such situations, there must be some force that "wins" over the safety motivation as individuals' cost-benefit analyses seemingly find it profitable to act unsafely. Due to organisational members' subjective rationalities, the benefits of unsafe behaviour will be of such value and the likelihood of an accident will be so minimal that safety rules are broken consciously. Leidner (1993) argues that employees do not act according to rules when they believe their interests are not well served by these rules. They might find themselves to be in a situation in which – when following all rules – the job is done less efficiently and managers will want to know why (Lawton 1998). Glendon and McKenna (1995) point to differing causes when employees choose to work in what is regarded as unsafe ways, and they argue that people's wish to demonstrate their good work skills sometimes may be the motivation for taking risks. Lawton (1998:94) echoes this view when she states that rules restrict behaviour which may be perceived to reduce the required skill to do the job successfully. In such situations, subjective rationalities will collide with official organisational rationality, and a difference in sensemaking processes will be evident.

In many organisations, elaborate safety systems exist that prescribe safety procedures for the prevention of potential damage, and the number of safety procedures may be high as more and more areas of work life systematically are scrutinised for risk situations. It seems reasonable to assume that it is difficult for employees to cope with the magnitude of risk assessments and safety procedures of many work places, and that a simplification of the risk and safety picture takes place through employee sensemaking processes. These assumptions are in accordance with the concept of bounded rationality (March and Simon 1958) in which it is discussed how organisational members are unable to take all facts into consideration in their decision making processes and will choose certain aspects and overlook others in order to reach a conclusion. Thus, in daily work life, employees and work groups will select "their" risk situations to focus their safety attention upon and more or less ignore others. If the total risk and safety picture was to be taken into continuous account, it would be close to impossible to work at all, it may be argued.

An organisation's official safety policies and the implementation of safety procedures will be based in organisational power relations. Power relations will also influence what is the organisationally permitted debate concerning safety. As some defintions of safety become included in the official rhetorics of an organisation, contradictory definitions may be labelled as illegitimate and negatively sanctioned, and safety taboo areas will develop. The consequences of such silencing of oppositional safety definitions may be counteractive to organisational members' commitment to official safety procedures. Another effect may be the development of backstage safety communities (Goffman 1959). More or less undercover safety cultures might thus be the result of organisational nonacceptance of individuals' and groups' safety definitions.

One way for organisations to cope with the complexity of safety constructs is to accept the existence of multiple definitions within the framework of a general safety policy which is broad enough and ambiguous enough to include different perceptions of safety. When discussing safety in organisations, Singleton and Hovden (1988) state that "... it is desirable to leave some flexibility with the operator. Humans are not automats, they seek variety of activity" (p. 157). In addition to the satisfaction of some work autonomy, it is also probable that the permission of multiple safety definitions will prevent safety overrigidity that may lead to low efficiency in daily work. Kjellén and Baneryd (1983) echo the importance of workers' need for independence and a feeling of being in charge when safety is concerned, and thus support a discussion of the inherent limitations of a stringent safety regime. Leidner (1993) argues that organisations will benefit from allowing workers some discretion to define their work situation, and that such individual control will further workers' interest and mitigate discontent.

But such a discussion raises vital dilemmas. An essential organisational question to pose concerning the possible permittance of different employee or group safety definitions will be whether it is possible to maintain multiple safety definitions and simultaneously assume compliance to a bureaucratic safety system which seems to be the norm of design for today's safety systems. Is it possible to combine "the best of two worlds", or is the ideological discrepancy between the need for autonomy

and individual creativity and the need for stringent procedures and regulations too great for this to become possible?

In my view no definite answers can be given to this question. The goal of organisational safety efforts is to prevent accidents and injuries, and situational circumstances will have to be taken into account when deciding upon safety measures in order to reach this goal. Also, the seemingly nonquestioned tendency of safety efforts to be embedded within a bureaucratic framework of thought needs to be assessed due to possible counterproductive elements of bureaucracy as the sole organising model of safety work. It seems a relevant question whether the "iron cage" ideology of bureaucracy with its routinisation and rule focussed approach may comprise inherent negative features that will estrange employees, prevent autonomy and creativity and create barriers to the development of improved organisational safety.

If employee safety constructs are "irregular" and "irrational" and differ from the safety requirements of the official safety bureaucracy, then an area of potential conflicts exists. Based on my theoretical perspectives, it can be argued that the best data in order to analyse an organisation's safety situation are to be found in employees' subjective safety rationalities. Organisations – and not at least safety research – therefore need to be attentive to these sources of organisational knowledge in their safety analyses, safety problem solving and the further improvement of safety systems. But: it seems to me a major question of doubt whether safety research so far has been able to – or seen it worthwile to – develop analytical and methodological tools that are fitted to catch a subjective and consequently complex safety reality. Without a safety research body which focusses upon and honours organisational members' subjective sensemaking, there is good reason to assume that organisational safety policies will continue to be constructed according to a linear and instrumental way of safety thought.

1.9.2. Managers and the construction of organisational safety meaning.

Most literature which is concerned with organisational safety (e.g. Glendon and McKenna 1995; Guest et al. 1994; Krause et al. 1990; Della-Guistina and Della-Guistina 1989; Dawson et al. 1988; Dawson et al. 1984) emphasises the importance of managerial engagement, enthusiasm, priorities, counselling and guidance in order to create a safe work environment. It is argued that without managerial support of safety issues, it is an almost impossible task to succeed with work safety improvements.

The acknowledgment of managerial influence can be seen in the numerous calls for managers to create a positive safety culture and prescriptions for how to do this which are found in safety literature. But this is not any easy and straightforward task as the vigour of employee safety definitions and the quality of relations between managers and employees will influence the degree of organisational acceptance of managerially proposed constructs. Still, though, Berger and Luckmann's argument (1966) is a useful reminder about a basic fact of organisational reality: He who has the bigger stick has the better chance of imposing his definitions. According to Gherardi and Nicolini (2000a), the safety dialogue within an organisation is not a conversation amongst peers as some voices have priority over others due to the distribution of organisational power and influence. Dawson et al. (1982) are also aware of the political dimension of safety when they argue that those involved in safety work are not equally matched in terms of power and influence. Power is the power to define, says Brown (1989; quoted in Czarniawska 1997).

Smircich and Morgan (1982) argue the centrality of managers as creators of meaning. Isabella (1990) states that managers use their interpretations of organisational reality to frame meaning for organisational members, and she calls the managerial constructs the "dominant reality". Other researchers talk about manipulative management (Calás and Smircich 1991), culture control directed at people's minds (Alvesson and Berg 1992), culture engineering (Kunda 1992), the

ability of some persons to set the stage for others (Czarniawska 1997) and the managerial discourse of control (Gherardi and Nicolini 2000b).

Silverman (1970) states that meaning construction is in a constant flux and will differ according to how organisational members interpret what is going on around them. Accordingly, competitions about "best" interpretations will continuously take place within the organisation. For a subjective view to become accepted as a "correct one", Silverman (ibid.) argues that what is important is its coherence with the already existing organisational world view and the available resources for promoting the legitimacy of the view in question. Pollner (1987) points to how some constructs of meaning through organisational negotiating processes will acquire more legitimacy and authority than others. Organisational power structures become visible when the reality definitions of specific actors acquire a dominant status and they are able to convince others - at least seemingly - that things "are" the way they define them to be (Czarniawska-Joerges and Joerges 1992). Such authoritative labelling is a compelling tool in the managerial strive to achieve meaning prominence as successful labelling can be considered a key to organisational power (Czarniawska-Joerges 1988b).

Czarniawska (1997) points to the role of leaders to provide the organisation with an illusion of controllability so that organisastional disorder might not be feared. Seen in this perspective, traditional management ideals might consider the existence of multiple safety interpretations as a disturbance they have to do something about. They put their trust in ever more sophisticated management and information systems to create a shared acceptance of the managerial definitions of organisational reality (Pym 1990).

Whether employee safety definitions that are incoherent with the official ones are allowed access into the structure of preconceived and logically constructed safety systems will have to be a matter of empirical study. But as these systems are contained within "rational" limits of what are legitimate and preferred safety efforts, there is reason to believe that they will tend to maintain a status quo definition of the organisational safety paradigm. I have not been able to find suggestions for a

safety approach that acknowledges alternative and "irrational" safety definitions in safety work, although safety researchers (e.g. DeJoy 1994) may point to the importance for safety management of organisational members' different attributional processes concerning safety. It seems doubtful that alternative safety definitions will be granted any significant room within existing safety programmes in the near future.

An area of managerial importance is how to document and evaluate safety efforts as managers need visible results in order to evaluate if the organisational safety work has proved effective or not. The measuring systems which are designed to quantify safety related events within a framework of preconceived safety categories are considered vital estimates of how organisations have succeeded in their safety efforts. It does not seem unreasonable to suggest that due to their importance as measuring sticks of perceived success for both an internal and external organisational audience, the quantified safety results (number of accidents, number of near-accidents, number of days without injuries, etc.) may become constructs that carry additional meaning besides their mere numerical representations. For instance, positive safety results may possibly attain additional meaning as evidence of managerial competence and might thus be suggested to be vital for managerial career developments. If safety records are given multiple meaning, it is not unreasonable to believe that they may initiate frustrations, confusions and contradictions that can prove harmful for the joint effort of safety improvement.

As I end my discussion of safety management, I will argue that in order to become a "successful" safety manager, it is necessary to be aware of symbolic and cultural aspects of leadership as well as the more instrumental ones (Schein 1992). A manager who does not reflect about the cultural and symbolic sides of managing safety will have difficulties in understanding events in which employees respond according to their cultural interpretations. If for example it can be assumed that employee perceptions of the genuineness of managerial care are important for their willingness to identify with managerial objectives in general, then such felt care will also be essential when it comes to the credibility of managerial safety measures seen from employees' points of view. Weick and Roberts (1993) support this by

arguing that the managerial language of care – in contrast to the language of efficiency – is an essential "success building block" for organisational safety improvements.

Also, safety managers who know how they might utilise symbolic and cultural leadership activities in order to promote their preferred safety definitions are more likely to succeed in their efforts than managers who do not take account of symbolic means of leadership. A small word of warning, though, is appropriate: Alvesson and Berg (1992) point to the requirement of symbolic managerial actions to be accompanied by material and social forms to support and legitimise what is expressed in symbolic terms. Without this being the case, symbolic management will over time lose its credibility and will ruin its potential for organisational influence, they argue.

Based on what I have said so far, I agree with Petersen (1988) when he argues that safety issues have to be managed like any other organisational areas. There seems to be no need for the development of specific managerial "techniques" in the performance of safety management. To the contrary, Della-Giustina and Della-Giustina (1989) maintain that safety issues have to be integrated in general management considerations and should be looked upon as integral aspects of production planning and implementation. Only by this inclusion of safety aspects in the core operations of organisations will safety considerations be prevented from becoming compartmentalised as a field which may or may not be taken into account in daily production decisions

1.10. A cultural perspective of safety.

The concept of safety culture has become a much used rhetorical statement in safety research and managerial safety vocabularies, and it may be suggested that the concept has achieved meaning as a symbol of safety success. Consequently, it has seemingly become included in the belief system of successful approaches to worker safety.

It is also my belief that a cultural perspective of safety is worthwhile both for research and practical safety improvement efforts. Through this framework, it will be possible to explore safety as actors' subjective experiences (Smircich 1983). A cultural perspective with its emphasis on informal processes will likewise be a tool for the investigation of coherence or not between an organisation's espoused safety theories and its theories-in-use (Argyris and Schön 1978). But in order to become fruitful for analytical and practical purposes, "safety culture" has to be removed from its present rhetorical position and be reframed to becoming an analytical concept. "Safety culture" has to be conquered - or possibly reconquered - as a concept of substance and prolific meaning. This can only be done by a brief investigation into the concept of organisational culture in general.

1.10.1. The search for culture.

There exists a multitude of definitions of what organisational culture "is". I will not choose one or two of these definitions and "swear allegiance" to them, but point to what I consider important aspects of cultural analysis. I agree with Alvesson (1993) when he states that culture analysis stands for a way of thinking about organisational phenomena - a research attitude - that emphasises informal, symbolic, subjective, and interpretive aspects of organisational life. It signifies a broadening of the "objective" attitude of organisational research by taking into account organisational aspects such as subjective experience, emotions, informal patterns, norms, ideologies and values. Subsequently, a cultural perspective tries to catch also the "irrational" elements of an organisation.

I find Geertz (quoted in Alvesson and Berg 1992) clarifying when he talks about culture as a fabric of meaning through which people interpret their experiences and receive guidelines for their actions. Accordingly, a cultural analysis must be an interpretive one in search of this meaning (Geertz 1993b). Holland and Quinn's (1993) argument that our cultural framework models the world for us points to the all-embracing forces inherent in organisational culture. This is echoed by Brook's (1997) emphasis of culture as comprising of schemas or collective knowledge structures. Also helpful to illuminate the concept of organisational culture is

Meyerson's (1991) definition of culture as "... a web of diverse, loosely coupled, and volatile networks of symbols and relationships" (p. 260). Over time, culture will create taken-for-granted elements in organisational members' perceptions (Brooks and Bate (1994) quoted in Brooks 1997). And finally, Pidgeon (1991) focuses upon my research theme when he talks about an organisation's safety culture as a system of meaning through which people understand hazards and which specifies what is important and legitimate safety considerations in the particular context.

When discussing culture research, Schein (1999) talks about organisational culture's different levels and how these will reveal different types of meaning to a researcher. According to Schein, the level of artifacts can be seen and observed but not understood if looked at isolated, and the level of espoused values are readily informed about but cannot be properly understood without deeper investigation into the culture. Lastly, the level of shared tacit assumptions is where cultural meaning makes itself known when these assumptions are being illuminated. Thus, culture research is not any simple task, and one has to realise that "... the important parts of culture are essentially invisible" (ibid., p. 21). The levels that a researcher chooses to concentrate her culture investigation around thus becomes a compelling aspect of culture research as the research findings will be greatly influenced by the choice of levels.

Whether to consider organisational culture as an organisational variable similar to variables as e.g. structure, production systems, etc., has been a long-standing debate within culture research. Those who liken culture to other variables look upon culture as something an organisation "has" as a building block among many others in the organisational design process (Smircich 1985). To me, this way of looking upon organisational culture seems inadequate. If culture has something to do with a fabric of meaning, a frame of reference, a web of networks of symbols and relationships and is manifested and maintained through the sensemaking efforts and actions by organisational actors (Harris 1996), I find it impossible to separate culture from other organisational phenomena. It seems to me that culture rather has to be looked upon as something which is always "in action" throughout the organisation, and accordingly, it cannot be restrained to some organisational aspects

only. Bate (1994) finds that when researchers utilise broad and inclusive definitions of organisational culture, one can delete "culture" and substitute it with the concept of "organisation". He thus finds it extremely difficult to discriminate between "culture" and "organisation" for analytical purposes.

An inclusive definition of organisational culture seems to be imperative in order to grasp its importance in organisational life. When culture is perceived as a state of organisational mind or as the character of the organisation, the tendency to look upon culture as something which may be easily changed by managerial decisions will also be contested. Organisational culture is sustained and transformed by organisational members' daily enactments. In such a perspective, a wish for cultural change requires nothing less than a fundamental organisational change.

And finally, an imperative question has to be stated concerning the search for organisational culture: Whose culture *is* organisational culture (Gherardi et al. 1998b)? Based in this, the issues of organisational power and influence have to be raised as an integrated part of any culture study.

1.10.2. The integration perspective.

Organisational researchers such as e.g. Deal and Kennedy (1984), Peters and Waterman (1982) and Trice and Beyer (1993) seem to utilise the culture concept as a coherent and unifying category which is shared by all organisational actors - except maybe some deviants. Culture is analysed within a theoretical paradigm that may be termed the culture integration perspective (Martin 1992; Frost et al. 1991).

Clarity, consistency, consensus and non-ambiguity are trademarks of both analysis and practical research applications within the integrative framework. Ambiguity is systematically excluded, and the culture is looked upon as a harmonious product of knowledge and practices (Gherardi et al. 1998b). It is looked upon as a matter of research technique to find these shared elements of an organisational culture, and it is likewise considered possible to come forward with appropriate prescriptions for how to develop a desired and shared culture.

It is a commonly stated critique against this research tradition that it is too superficial and that it probably accounts for only parts of an organisational culture. The research acceptance of the official philosophy and the espoused values of the culture as *the* culture is questioned, and the necessity of a more polyphonic cultural picture is argued. Integrative culture research has been dominated by managerial claims to be the legitimate "masters" of situational definitions, and consequently, managers' views have been given the status of representing organisational "reality", critical voices argue.

When organisational culture is viewed from the integration perspective, a questioning of central elements of the main cultural assumptions may be looked upon as threatening to cultural unity (Schön 1991). A discussion of basic values will be embarrassing if noticed by the external world, and this might be ruining for a presented self-perception of consensus and unity (Goffman 1959). The organisation will utilise negotiations and defence mechanisms to handle cultural opponents, and a marginalisation of such organisational members may be attempted by labelling them as "irrational", "emotional", etc. - labels that set them apart from the rational paradigm of organisation and protect the consensus organisation against opposition.

A researcher can thus never assume that the non-existence of open opposition to the official culture depicts a "true" picture of organisational consensus and feeling of unity. Frontstage loyalty and unity may often exist in spite of internal tensions (Goffman 1959). For individual actors, what may become the answer is the setting up of backstage arenas in which they can contradict frontstage values without being sanctioned. Such backstage performances function as internal medication as well as being cohesive for the backstage participants, and thus, they include both integrative and differentiating aspects.

1.10.3. The differentiation perspective.

A differentiation perspective of culture research will question a culture's consensual status (Martin 1992; Frost et al. 1991) and will point to the probability that several

organisational cultures exist in opposition to each other within the same organisationan. What is assumed to take place is a cultural competition for the hegemony of situational definitions. Contrary to what is perceived in the integration perspective, the "normal" organisation thus will have organisational dissensus as a trade mark. The different cultures - often termed subcultures - will have internal consensus, and according to Brooks (1997), separate subcultural identities are developed. Frost et al. (1991) consider such cultures to be "islands of clarity" in organisations that are predominantly culturally inconsistent.

A belief system including desired action patterns, taboos, norms and values will exist on group level (Alvesson and Berg 1992), and culture research accordingly has to take account of the subcultural level in order to comprehend the cultural complexity of an organisation. The group culture may have stronger influence on organisational members' reality definitions than the official organisational culture, and the subcultural group often becomes people's main frame of reference according to the differentiation perspective.

Group identity is defined in opposition to other groups as groups look upon themselves as unique social constructions (Turner 1992b). Goffman (1959) argues that groups are instruments of identity creation in which distance to other organisational members and groups is created. According to Schein (1992), a group contains a shared language and common definitions of organisational reality. Group members share a "sub-dialect", a body of social and work competence through which "how to be at work" is defined and sustained.

Gergen (1992) discusses dissensus and differentiation as a positive aspect of organisational life. He argues that dissensus is vitalising for organisastional performance, and if everything is seen to be running smoothly, then the organisation is in trouble. The consensus hegemony in managerial ideologies, though, is a barrier for an understanding of the positive aspects of dissensus and heterogeneity. According to Gergen, the search for consensus "calms down" and streamlines organisations too much, and the inherent organisational vitality of multiple definitions ought to be treasured instead of being subdued.

1.10.4. The fragmentation perspective.

This third perspective of culture analysis is discussed by several researchers (e.g. Gherardi and Nicolini 2000a; Martin 1992; Frost et al. 1991; Martin and Meyerson 1988). The fragmentation perspective has, however, been less employed in cultural research than the previously mentioned ones.

Ambiguity, fluctuation and multiplicity are key concepts of the fragmentation perspective. The organisation is viewed as a fluid and continuously changing entity where values, norms, group membership patterns, work actions, social relations, etc. never can be analysed in terms of stable patterns or unambiguous meaning constructions. Organisational members' interpretations of events and their actions accordingly take place in cultures that may be simultaneously differentiated, unified and fragmented.

Due to the fluidity of organisational life, members' informal group memberships are fluctuating, shifting alliances constantly form, and people's arguments may change from one day to the other. What seems to be the situation is summed up by Isabella's (1990) evaluation of her data collection process (p. 13): "... concerns shifted, reactions varied, and perceptions were both similar and diverse". Nothing is stable seen from a fragmentation perspective except for the situation of instability. Holland and Quinn (1993) talk about cultural models to be used when suitable and set aside when this is not so, suggesting that organisational culture is fragmented, incoherent and situational. Organisations are thus characterised by confusion rather than clarity and predictability, and it is never possible to foretell organisastional members' behaviour due to this situation of flux. Tensions between organising and disorganising forces - forces which simultaneously promote unity, differentiation and fragmentation - will always take place (Gergen 1992), and such tensions will be illuminated by a fragmentation framework of analysis.

What is focussed in a fragmentation culture analysis are the inherent ambiguities in any work role with the resulting non-predictable behaviour of organisational actors. Such a situation is considered "normal" within a fragmentation view, while it might

be looked upon as "irrational" and "dysfunctional" within other cultural perspectives. The concept of "dysfunctional behaviour" does not have any place within a fragmentation paradigm.

It seems reasonable to suggest that a fragmentation view will be the preferred analytical perspective within a post-modern framework. A post-modern view that emphasises local and individual understanding as opposed to grand theories is in line with a cultural perspective where uncertainty, ambiguity, shifting relations and conflicting views are at the forefront of interest.

I have always wondered about the states of tranquility and clarity that are presented in cultural research, as such "straightforwardness" does not coincide with my own experiences as an organisational member. I am thus glad to find an analytical perspective that also includes confusion, contradiction and diversity in organisations. But the fragmentation perspective also makes me wonder if too much emphasis can be placed on heterogeneity and ambiguity, and if there is a chance that clarity and unity might be overlooked due to a belief in fragmentation as a main organising principle.

I follow Martin (1992, p. 169-170) when she states that "... a researcher has to abandon the objectivist assumption that one perspective will be correct, or more correct, than others". To do a cultural multiperspective analysis is the challenge, and I will analyse MAIE safety culture with the help of an integration as well as a differentiation and a fragmentation perspective.

1.10.5. Cultural expressions.

Symbols may be defined as "something that in a somewhat ambiguous way represents something else" (Alvesson and Berg 1992:211). In order to interpret a symbol's meaning and significance, the interpretation calls for an association of ideas out of the concrete event (Morgan, Frost and Pondy 1983). Cultural expressions like rites, rituals, ceremonies, organisational stories, language patterns, etc. have been at the core of much culture analysis. According to Brooks (1997),

such ritualistic and routinized behaviour helps to preserve organisational members' assumptions and beliefs and serve as an anchor point amid organisational ambiguity and change.

Patterns of behaviour, pay systems, meeting structures, training systems, physical surroundings, information strategies, ceremonies, etc. may also be considered as expressions of the dominant cultural vision and be interpreted as cultural expressions. Besides their straightforward organisational functions, there will be symbolic sides to these different cultural expressions which serve to reinforce cultural meaning.

When emphasising symbolic aspects in cultural analysis, research efforts will focus around situations that are open to multiple interpretations and definitions. The ambiguity and fluidity of such organisational aspects ought to make researchers aware of the dangers of interpreting events in order to fit them into "proper" symbolic categories. Alvesson and Berg (1992) argue the existense of a symbolic romanticism in culture research which tends to interpret most actions within a somewhat spectacular and symbolically based organisational reality. Such "symbolic pollution" is in their opinion counteractive to a broader understanding of the complexity of cultural processes. I follow them in their reflections, and I find it vital to interpret cultural expressions and symbols with great care. It is through social interaction that the meaning of symbolic actions become established, and thus it is imperative to focus on the situations where symbols are utilised in order to understand their significance (Feldman 1996).

1.10.6. Safety culture and research considerations.

It has to be emphasised that in all organisations where safety questions are present on the agenda, there exists a safety culture. The organisation's safety culture may be seen as the totality of beliefs and practices concerning safety, and whether this culture is mainly a positive force for the improvement of work safety or whether it also comprises negative aspects that are barriers for improvement will be an issue of empirical research. What is important to acknowledge is that there is no reason to

assume that a safety culture per se is a positive tool for improved safety. Culture - and safety culture - are analytical concepts to which cannot be attached positive or negative connotations as such.

When relating to my previous discussion of culture, I do not think it is possible "easily" to implement a positive safety culture in any organisation. I do not consider organisational culture as an organisational variable, but rather as constituting *the* organisation with its provision of reality definitions, basic assumptions, values and norms for organisational actions. Seen from this perspective, a safety culture can neither be implemented as an isolated issue nor "had" along with other organisational systems and programmes. A safety culture will be developed within the framework of the overall organisational culture, and it will be a part of this culture whether organisational actors like it or not. So in order to improve a safety culture - which often is called for in safety literature -, what has to be focused is the total organisational situation. Planned cultural change is a complex process (Schein 1999) whether it concerns safety or not, and without taking into consideration the totality of the existing culture, cultural change within specific areas is unlikely to be achieved as planned.

A consequence of my view of safety culture as being inseparable from the general organisational culture is that my previous culture discussion applies to the concept of safety culture as well: A safety culture can be studied from an integration, a differentiation and a fragmentation point of view - and from a view combining the different perspectives. The safety culture is created and sustained through organisational members' enactments within the framework of the existing culture, and numerous safety culture expressions exist that represent and sustain cultural beliefs, assumptions, values and norms. Some of these will contain more symbolic features than others, and it becomes a challenge for safety culture research to interpret the different expressions within a cultural context without falling into the trap of either ignoring their symbolic significance or over-interpreting expressions by attributing them with meaning which is primarily based in researcher assumptions.

As general organisational culture is marked by complexity, ambiguity and a state of fluidity, the same can be said about safety culture. Individual and group safety sensemaking processes will be complex, situational and ambiguous, and some organisational members' definitions will be more influential than others also within a safety culture. Taboos to prevent the questioning of what is officially perceived as central safety beliefs are developed, and symbolic actions to sustain the beliefs take place. Safety alliances and affiliations will differ, and organisational actors' perceptions about safety will continually be under revision according to their present organisational situation.

Often, work groups will be the "home" of different safety cultures, which are fundamented in the local knowledge, the social relations, authority and power, and the systems of interaction and communication that exist within the groups. Differences in safety values and norms may be developed between work groups, and different perceptions of what are safety-related issues or not may consequently exist between groups.

Organisational safety cultures and safety subcultures may or may not be committed to safety learning. In some cultures, accidents and unwanted incidents form the basis for learning in order to improve safety work, while in others, such events are utilised somewhat superficially as learning devices and do not initiate safer work behaviour.

I have mentioned some topics of interest for safety culture research in order to highlight that these themes do not differ in their problem orientation from organisational culture research in general. The purpose has been to illustrate that safety culture research will be identical to general culture research when it comes to data collection, the utilisation of concepts and theoretical perspectives. What is the main difference is that safety culture research focusses upon safety issues while other culture studies have different foci.

1.11. Safety and organisational identity.

Assumptions about oneself and the external world are basic building blocks in the social constructs that are known as organisations' self-perception and identity. Organisational identity – created in interactions between organisational members and including the processes of formulating, editing, applauding and refusing – is constantly being constructed and reconstructed in conversations (Czarniawska 1997). It may be looked upon as the temporary "end result" of a continuous process of self-perception and features distinctive, central, and enduring organisational characteristics, according to the views of organisational members (Czarniawska, ibid.). The inherent vision in an organisation's identity will ideally impart meaning, motivate, and resolve organisational concerns along the way (Pettigrew 1979). Porac et al. (1989) suggest that organisations' competitive strategies are founded in their identities.

Czarniawska (1997) argues that identity in modern organisations will tell a tale of self-respect, efficiency, autonomy and flexibility, and Erez and Earley (1993; quoted in Weick 1995) list the needs for self-enhancement, self-efficiacy and self-consistency as motivators in the development of organisational selves and identities.

A shared feeling of identity is considered of importance from managerial points of view as it is perceived as vital for organisational coherence. Of many reasons, though, it is not uncomplicated to establish a common identity. At group and individual level, different identity concepts will exist, and these may to varying degrees coincide with the officially espoused identity of the organisation. Kellner (1992) argues that what is typical of identity concepts in post-modern times is a state of fragmentation and disconnection, and Gergen (quoted in Czarniawska 1997) states that a quest for a unified identity concept is not a compelling research objective as identity fragmentation is the way of life in today's organisations.

It will be a research theme to inquire whether the concept of safety is included in an organisation's self-perception and identity. The presence or not of safety topics in the way an organisation looks upon itself will indicate whether safety is considered

an issue of organisational importance - at least at the espoused level. An investigation of what goes on at individual and group level is needed to establish if a safety concept which is included in a managerially promoted identity also is incorporated in individual identities throughout the organisation.

Groups and individuals will construct their identities from their situational perceptions of organisational realities and their participation in communities of practice – informal groups defined by the ways in which members perform their work and interpret events (Gherardi and Nicolini 2000a; Gherardi and Nicolini 2000b; Gherardi et al. 1998a). It is not unreasonable to assume that they will adapt to an officially promoted identity concept depending on how they evaluate the credibility of the concept's world views and visions and depending on the organisational situation in which the identity is being enacted. Marcus (1992) talks about "... the situated production of identity" (p. 315) and the existence of multiple identities within an individual. He also asks the question why one identity becomes dominant for a while at the expense of other identities.

According to Rosaldo (1989), an individual may be likened to a busy traffic intersection where different identities flow back and forth, and Gergen (1991) is occupied with the many voices of one identity (p. 83): "Each self contains a multiplicity of others, singing different melodies, different verses, and with different rhythms. Nor do these many voices necessarily harmonize. At times they join together, at times they fail to listen one to another, and at times they create a jarring discord." In his research on service work, Leidner (1993) talks about separate situational identities and how one identity is taken to the forefront at one time and being "stored" in another situation. An investigation along these lines may be able to illuminate both identity unity, fragmentation and disconnection.
If it is a general assessment among employees that safety considerations exist more in the officially espoused values than in real life, then it is improbable that safety becomes a shared organisational identity aspect among organisational members. The perceived lack of safety awareness may instead constitute a vital element of their group and individual identities. But differences between groups and individuals in their identity perceptions are likely to occur. Safety may have a more

or less prominent place in the different self-perceptions and identity constructs disregarding their basis in the same work situation. When such differences can be established, then the question has to be posed what the reasons for the discrepancies are.

If employees maintain – backstage as well as frontstage – that safety is a prominent part of their work identity, then there is reason to assume that a high level of individual safety awareness can be found. If the majority of employees affirm this identity perception, it can be assumed that worker safety is considered vital by the organisation as a whole. When this is the case, a safety focus will be shared among organisational members and will be a vital component of organisational unity. Safety may even become the main element around which organisational identity efforts are concentrated.

Erikson (quoted in Gergen 1991) argues that there is no feeling of being alive without a sense of identity. When following his line of thought, one has to consider individual and organisational identity formation as main mechanisms of organisational life.

1.12. Where do my theoretical considerations lead me?

With a post-modern critique of preconceived categories and assumptions in mind, it seems somewhat presumptuous to attempt to summarise my specific theoretical position. But nevertheless, I will do so, and in such a task, I illustrate that I remove myself from a "pure" post-modern stance.

I appreciate the post-modern critique of the "rational madness" in organisation theory, and follow post-modernism in its invitation to focus upon organisational complexity, pluralism and ambiguity. I also agree with the post-modernist refusal to construct "grand narratives", and I will concentrate my efforts in the construction of local knowledge. The mundane and common in organisational members' safety related work life will be the basis for my investigations and theory construction.

A main approach for the disclosure of organisational complexity and plurality will be to concentrate upon organisational members' subjective safety sensemaking processes in which they interpret safety related events and construct meaning in their organisational reality. I believe this approach to be vital in order to promote an analysis of organisational safety that reaches beyond the official and espoused organisational meaning constructs and enables me to catch also the theories-in-use. The concepts of organisational frontstage and backstage arenas (Goffman 1959) will be essential tools in the uncovering and analysis of the safety complexity, and managers' authoritative labelling and the "combat" between dissimilar interpretations will be important analytical issues to consider.

The formation of organisational identity is based in organisational actors' sensemaking processes, and I will investigate into whether safety plays a role in the establishment of organisational identity. Closely related to the identity question is the issue of organisational culture, and as a main analytical approach, I will do a cultural analysis of organisational safety. The analysis will comprise different levels of the organisational culture, and will be based in the concept of organisational cultures as simultaneously shared, differentiated and fragmented – a multiculture analysis where none of these cultural perspectives are excluded as means of analytical understanding although post-modernist influence possibly might have induced me with a preference for the cultural fragmentation perspective.

Sensemaking processes, organisational culture and organisational identity will thus be main theoretical lenses through which I will attempt to analyse organisational safety. My concluding construction of local knowledge will accordingly be fundamented in these analytical approaches. Through these theoretical choices of mine, it is my belief that I will be able to "understand" safety issues in a way that focusses on safety plurality and that offers justice to more than one interpretation of the organisational safety reality.

CHAPTER 2

METHODOLOGY

2.1. Introduction.

The choice of research methodology is never a decision that is taken in isolation from a researcher's general theoretical constructs. In this chapter I will make visible the reasons for my choice of methodology, I will refer to my field experiences seen from a methodological point of view and I will discuss what I consider the strengths and the drawbacks of my preferred methodology.

2.2. Theoretical assumptions to influence my methodological choice.

In the previous chapter, I have stated that I want to do an exploratory study of worker safety in which multiple organisational voices will be emphasised. This objective of mine is based in theoretical assumptions that I have laid out and discussed throughout the chapter. I agree with Marsden (1994) when he states that in order to improve organisational understanding we need to build from where people actually are rather than where we think they are or where we would like them to be. To be able to construct organisational understanding, then, I find it a necessity to base my work in the complexities of organisational life which often seem to be smoothed out in research (Weick 1987). A study which is focussed around organisational actors' sensemaking processes and subsequently illuminates the subjective safety realities that are to be found in an organisation thus becomes vital for me in my endeavour to catch cultural complexity and to make room for multiple organisational voices. I have also argued for the utilisation of a cultural analytical framework in a search for both visible and hidden aspects of organisational safety, and I have stated a research interest in possible incongruities between espoused safety ideologies and safety theories-in-use (Argyris and Schön 1978) which may be acted out in frontstage and backstage situations respectively. It is my belief that these cited approaches will enable me to uncover organisational complexity and to become aware of potential unity as well as differentiation and

fragmentation in the safety culture. A multiperspective analysis will hopefully emerge as a result of these theoretical assumptions of mine.

These theoretical considerations of mine can be argued to be influenced by a post-modern critique of organisational research. I have discussed post-modernity in chapter 1, and this critique has been important for me in my choice of research perspectives. My initial feeling that organisational complexity and ambiguity are frequently overlooked in organisational analysis and my scepticism of pre-conceived analytical categories have both been strengthened by post-modern thinking in which the emergence of seemingly streamlined organisational entities, coherence and "rationality" in organisational research have been questioned and challenged (e.g. Czarniawska 1997; Hassard and Parker et al. 1993; Reed and Hughes et al. 1992). This paradigmatic critique has been in my backbone throughout my research process. When I – in spite of this – have not chosen a more distinct post-modern approach – if one can talk about "distinctiveness" when discussing post-modernism – this is due to my previously cited reservations of what I consider to be post-modernism's reluctance to try to construct organisational knowledge which goes beyond the establishment of a fragmented organisation picture that to a large extent denies researcher interpretation and analysis. I wish to be able to come up with organisational understanding that accounts for more than fragmented "snapshots" of organisational reality only, even though this organisational understanding of mine will not have the ambition of standing forward as "grand narratives" that depict general organisational "truths".

In order to accomplish an analysis built upon my cited assumptions, I need methodological tools which do not reduce organisations into a few simple categories, but which offer multifaceted accounts of organisational reality (Turner 1988; quoted in Mouly and Sankaran 1995) and embrace the subjective nature of organisational members' views of their experiences (Brooks 1997). Accordingly, I do not want to study organisational safety seen predominantly from official and managerial perspectives. It is furthermore a vital point for me that in order to grasp the safety culture(s) of an organisation, it is essential to focus my research in the

mundane and everyday actitivites of work life – although without neglecting the more symbolic sides of organisational safety.

2.3. My methodological choice.

When considering methodological options based in these thoughts, the choice of research methodology seemed a comparatively simple question to resolve: I decided upon becoming an organisational anthropologist, utilising ethnographic methods as my main research methodology. Ethnography is distinguished from other research methodologies by researcher participation in the daily life of the researched organisations over an extended period of time while collecting all types of data that may throw light on the chosen research issues (Hammersley and Atkinson 1995; quoted in Bate 1997). Because of this approach, ethnographic research becomes focussed around the discovery of "problems" rather than a priori hypotheses brought into the organisation (Emmet and Morgan 1982; quoted in Wright 1994). Also, Wright (ibid.) states that a "trademark" of many ethnographic studies has been an interpretive approach in which researchers have tried to understand organisations as sites for construction of meaning. It is the core process of ethnography to mediate such meaning constructs (Agar 1986).

Based in my theoretical assumptions and my research objective, ethnography as it is outlined here is an answer to my quest for a methodological approach. It has seemed almost inevitable for me to choose ethnography as the methodological foundation of this study, and I think the methodology issue is the research decision that has troubled me least during this work. I have never regretted or doubted my methodological choice.

2.4. Ethnography as research methodology.

Many researchers have commented upon the hows and whys of ethnographic research (e.g. Bate 1997; Mouly and Sankaran 1995; Bryman and Burgess (eds.) 1994; Geertz 1993a; 1993b; 1988; Kunda 1992; Hammersley and Atkinson 1991; Wadel 1991; Woolgar (ed.) 1991; Sanjek (ed.) 1990; Bryman 1989; Van Maanen

1988; Jackson 1987; Agar 1986; Punch 1986; Whyte and Whyte 1984.). What is made clear in these – and other – works is that no "authoritative recipe" is offered for how to become an organisational ethnographer, although the methodology is best known for its fieldwork and the frequent utilisation of participant observation (Wright 1994). I believe that this absence of ethnographic recipe is in accordance with inherent principles of ethnographic research, although a recipe can be longed for when you are "out there", trying to stand on your rather shivering and unstable ethnographic feet.

2.4.1. Ethnography as a paradigm for research.

The lack of clear prescriptions for ethnographic performance is based in ethnography being more than a mere research methodology. In essence, it is a paradigm for research: It is a way of thinking about organisational analysis (Bate 1997) that makes an ethnographic approach difficult to utilise as a methodology without the researcher agreeing to basic principles of ethnographic thought. Even if ethnographic research is carried out in multiple ways, the most basic principle of ethnography will always have to be focussed: The researcher attempt to involve herself with her research "body" in order to gain access to varied and unstructured organisational information and the emphasis that is laid upon the discovery of problems rather than the testing of researcher pre-conceived categories of what goes on in the organisation in question.

According to Van Maanen (1988:117), ethnographic fieldwork "... is a long social process of coming to terms with a culture". Agar (1986) states that the essence of ethnography lies in the encounter with "alien" worlds and the researcher's sensemaking process of these worlds. Through the researcher's position as both an insider and an outsider at the fieldwork site, what hopefully will emerge is a "discovery of problems" that becomes visible by the interaction between the fieldworker's general organisational knowledge and the internal perspectives the fieldworker learns in the field (Wright 1994). This exploring attitude and the exclusion of a priori research categories are the methodology's basic fundaments.

Woolgar (1991) claims that uncertainty is a key principle of ethnographic research, and that no easy interpretations and definitions ought to exist for an ethnographer.

Pollner (1987) states that the contribution of ethnography is its potential and will to reveal the many organisational layers of assumptions, skills and practices through which organisational actors construct their realities, and Wright (1994) emphasises how ethnographers analyse the way people make meaning in particular situations out of their available cultural repertoire. These research interests and research foci will exclude many researchers from using ethnographic methods as the practising of ethnography can be looked upon as a paradigmatic way of apprehending the organisational world (Linstead 1996). An ethnographic approach involves epistemological assumptions that makes it unsuitable and unaccommodating for researchers that seek narrowly defined, quickly found and quantified organisational information.

2.4.2. To do fieldwork.

"To be there" – to do fieldwork – is a basic trait of ethnographic research. The researcher is expected to spend considerable time in the organisation over a lengthy period. The main reason for researcher attendance over time is to gain psychological access to the organisation so she is considered a semi-insider and is able to achieve organisational information that otherwise would not have been attainable. Through longitudinal fieldwork she will be able to analyse the organisational situation based in a more complex picture than if her data were obtained by other methods of inquiry.

What I consider the most vital contribution of ethnographic research is that it is an instrument for taking account of the polyphonic qualities of organisational reality. Through ethnographic fieldwork, the researcher is able to recognise the multiplicity of organisational actors' perceptions of organisational life. If this research goal is achieved, the researcher will be able to develop knowledge that penetrates the organisational surface and represents multiple organisational realities.

"To be there" and "how to be there" are essential themes of ethnographic research. Neither is simple and easy to deal with, and much conscious thought is needed regarding these aspects. "To be there" or rather to gain access to an organisation is extensively commented upon by many researchers (e.g. Mouly and Sankaran 1995; Hammersley and Atkinson 1991; Bryman 1989), and without spending too much time on this issue, I will emphasise how the researcher ability to gain "psychological access" probably depends upon how she first was introduced to organisational members. A researcher will have to be granted physical access, and management usually holds the key to whether access is permitted or not. So from the very outset, most fieldworkers will be identified with management, and this organisational entrance will have to be consciously taken into account by fieldworkers as it will have a bearing on their future in the organisation.

How fieldworkers go about their data collection is the most crucial aspect of ethnographic fieldwork. "How to be there" includes to gain the much talked about "psychological access" to groups and individuals. To develop rapport - sympathetic relations - with different types of organisational members requires a social ability which fieldworkers have to muster. This is a matter fraught with many difficulties and which requires constant consciousness and alert from fieldworkers. It is not an easy task to find one's feet in strange surroundings – "... an unnerving business which never more than distantly succeeds" (Geertz 1993b:13). No recipe can be set up for the social awareness and respect needed to become at least partly accepted as a part of – although a strange one – organisational everyday life.

A main criteria for performing "good" ethnographic fieldwork is fieldworker acknowledgment of the significance of differing organisational reality perceptions. The fieldworker has to be aware of the potential danger of becoming immersed into the world views of some groups and individuals and to believe that their perceptions are the only ones worth taking notice of. When multiple realities are being recognised to the best of the researcher's ability and given their place in the data material, it is my belief that this broad scope of investigation is a main reward of ethnographic fieldwork.

2.4.3. Ethnography and "objectivity".

But there are critical issues to consider even if the researcher is aware of multiple organisational realities. The researcher will never be able to report in any "objective" way what is found in the field even though she tries to do this to the best of her abilities. What is observed or is being told by organisational members will always be filtered and interpreted through the fieldworker's own perceptions and influenced by her own world views and preconceived ideas. What she finally reports will not be any exact replica of what "really" happened in the field. The "results" of a fieldwork study will always be a product of the interaction between the researcher and the phenomena which are studied (Turner 1983).

Notwithstanding that researcher empathy is being looked upon as a prerequisite for the success of ethnographic fieldwork, it is impossible for anybody fully to perceive other people's subjective realitites. The commitment to transcribe organisational life may be there, but what in effect comes out of the research process is always a translation carried out by the researcher (Bate 1997). I follow R.D. Laing (quoted in Gergen 1991:89) when he states: "The data (given) of research are not so much given as *taken* out of a constantly elusive matrix of happenings. We should speak of *capta* rather than data." Or as Geertz says it (1993b:9): "... that what we call our data are really our own constructions of other people's constructions of what they and their compatriots are up to ...".

The researcher will herself be an active participant in ethnographic analysis, and a notion of being an observer only without influencing the process at all is not in line with my thinking about research. To produce knowledge is a human act (Woolgar 1991), and researcher statements always have to be looked upon as the result of this interpretive processes. An ethnographic research mode does not constitute any exception from this. What is needed is a critical and reflexive researcher perspective regarding her data collection and the subsequent analysis.

2.4.4. Participant observation.

Participant observation is the instrument which anthropologists traditionally have used as the way of gaining research insight. The concept implies that a fieldworker does more than observe what is going on in the organisation: she also participates in a wide variety of organisational activities.

Whether participation is possible to achieve depend on the relations between the researcher and her informants, and this issue is commented upon at other points in this chapter. Observation is the more "simple" objective to succeed with as it mostly depends upon the researcher herself. But even in their "pure" forms – if hypothetically we assume that such forms exist – observations are only partly helpful to understand organisational realities, as the observer lacks the inherent meaning construction of an action which is possessed by the actor (Schein 1999; Schutz 1967).

Both participation and observation are demanding aspects of ethnographic research. But worse is still to come: To be a participant observer – to be an insider and an outsider at the same time which traditonally has been a "requirement" of the ethnographic ethos – is a difficult task which calls for social abilities and a conceptual clarity that I do not know whether are realistic to require of anyone. The two conflicting roles of being a participant observer will remain in constant tension throughout a fieldwork (Wright 1994). In spite of the problematic sides of participant observation, though, it is a highly praised and almost mythical element of ethnographic research. Because of this, I feel it necessary to point to inherent difficulties of the participative and observational emphasis in ethnography. Participant observation which is performed without an awareness of its limitations will become a less credible research tool than when accompanied with reflections about its complex sides.

I also find a degree of romanticism in ethnographic accounts regarding participant observation. Relations between informants ("natives") and the researcher may be idealised, and the well-known anthropological expression of "going native" – a

fieldworker tendency to become totally absorbed in life at the fieldwork site – is said to be a common occurrence of ethnographic research. Due to the nature of ethnographic fieldwork, this is probably an almost inevitable aspect of the fieldwork experience. The challenge of ethnographic fieldwork will be to allow oneself to become emotionally immersed with the field site's way of life and at the same time keeping the intellectual and analytical distance that is required in order to evaluate one's own fieldwork methods and analytical endeavours. The romanticism of becoming a member of the "native tribe" may be personally rewarding, but it is doubtful whether such an immersion promotes analytical efforts. To the contrary, Geertz (1993b) points to the danger of such a position blocking the researcher's view of her own professional role and thus becoming a threat to anthropological analysis. Only romantics or spies would find a point in becoming a native, he argues.

Geertz (1993a) sheds light upon the difficulties involved in becoming immersed in informants' lives. He argues that it is impossible for any researcher fully to comprehend other peoples' imaginations as though they were one's own, and that this is a mission which researchers ought to abandon: "To grasp the concepts that, for another people, are experience-near, and to do so well enough to place them in illuminating connection with experience-distant concepts theorists have fashioned to capture the general features of social life, is clearly a task at least as delicate, if a bit less magical, as putting oneself into someone else's skin. The trick is not to get yourself into some inner correspondence of spirit with your informants. Preferring, like the rest of us, to call their souls their own, they are not going to be altogether keen about such an effort anyhow. The trick is to figure out what the devil they think they are up to" (p. 58). Geertz believes that accounts of other peoples' subjectivities can be given without the illusion of becoming "soul-mates". What is needed, he argues, is what he calls "normal capacities" for relationships including a sensitivity of the limits for what is acceptable researcher "intrusion".

Some problems of the fieldwork role are succinctly captured by Freilich (quoted in Wadel 1991):

"A person may drink
(participate in the native culture)
drink heavily
(participate, fully, in depth)
get drunk
(temporarily go native)
or become a drunk
(go native and stay in that condition)."

Barley (1983) completes the metaphor when he talks about the "ethnographer hangover" which takes place after a fieldwork is finished: The fieldworker feels extremely happy to be back in her own environment and finds the fieldwork site almost unbearable to think about.

In his account of fieldwork in Cameroon, Barley (ibid.) claims that he was never really accepted, and therefore was not able to "participate" in an ideal sense of the word. He found he was tolerated as a "harmless idiot" who brought certain advantages - but also some disadvantages - to the fieldwork site. Barley thus shatters the romantic notion of the fieldwork experience in which the fieldworker and her informants are spiritually matched and where the relations between them are dominated by acceptance, inclusion and mutual trust. Sanjek et al. (1990) also join the many ethnographers who in recent years have provided insight into researchers' more subtle and not so often mentioned fieldwork difficulties. Although many of these reports are based in fieldwork experiences in foreign settings, there is reason to believe that similar fieldwork challenges will be present also when a researcher performs fieldwork in a location which is less novel to her.

With these critical reflections in mind, I believe that ethnographic fieldwork will enable the researcher to collect data about the formal and not least the informal processes of organisations in ways that shed light upon the complexity of organisational life. Through observation and participation, the researcher hopefully will become enlightened about organisational backstages as well as frontstages and will be able to explore into possible inconsistencies between espoused

organisational theories and the theories-in-use. When commenting upon doing ethnographic research, Geertz (1993b:20) states that "... it is not necessary to know everything in order to understand something". Based in this research optimism it is possible to argue that the necessarily limited organisational insight an ethnographer is able to achieve nevertheless will enable her to comprehend significant aspects of organisational life.

During my own fieldwork, I never became a "classic" participant observer who participated in all the daily chores of my fieldwork site. When I was given access to the organisation in question, it was agreed that I was to become an observer of organisational work and a participant in organisational life of the work place, while full participation of mine in the work chores was never a question on the initial negotiating agenda. I considered it unwise to ask for the utilisation of full work participation as my research methodology, mainly because it soon became fairly clear to me how "proper" research methods were defined in the eyes of those who were the potential gate-openers for me into the fieldwork site in question. Even to be given permission to become an "observer" was something not easy to achieve, and numerous more or less subtle indications told me that this was the most I could hope for. Later, though, I was able to partake in the work processes at some of the work stations of my fieldwork site to some degree. Thus, I got some sort of feeling what work chores and safety issues were all about which was built upon more than observation only.

When I – in spite of the limited work participation I was able to go through with – do not hesitate to look upon myself as some sort of participant observer, it is because of the extensive participation that I carried through in the social life of the fieldwork site. I mingled with organisational members at all possible occasions, at breaks and at their side while they performed their work tasks. Through this day-to-day participation of mine, my social relations to my informants were established, and these relations allowed me to collect my data material both while socially participating or at other times in more formal and pre-planned situations. Thus, I consider my previous discussion of participant observation to be strongly relevant to my doings at my fieldwork site, even though my participation mostly was carried

out without the direct participation in work tasks. I believe that both the constant tension between the observer and the participant role and the danger of becoming a romanticising researcher who is totally absorbed in the effort to be included as "one of them" as well as the other discussed issues of participant observation apply to my own fieldwork experience just as much as they do to fieldwork situations in which work participation is a more central research element than it was in mine.

2.4.5. Fieldwork relations.

In ethnographic research, the researcher becomes involved with organisational members in ways that differ from other researchers' involvement with informants. Close relations between the ethnographer and organisational members – which is a "must" in the ethnographic endeavour – pose multiple challenges in the work process, and considerations regarding such relationships need to be taken into constant account by the fieldworker.

An "insider" in a social setting – for instance an organisation – can be defined as a person who makes subjective sense of her own experience within the setting's frames of reference (Merton 1972; Schutz 1964; quoted in Bartunek and Louis (1996)). Although never achieving an "insider" position, the ethnographer for a while will become a "semi-insider". I think it is fair to claim that even though the researcher is conscious about her relationships and will try to avoid becoming more tied to some informants than others, there inevitably will develop situations in which the researcher "neutrality" will be put at stake. On account of being a human being, the researcher will probably become more attached to some persons than others. Becker acknowledges this situation (quoted in Taylor and Bogdan 1984) when he argues that a researcher cannot avoid taking sides in her studies, disregarding her conscious efforts not to do so. But when being aware of one's biases, it ought to be possible for the researcher to work with her relations to other actors and groups in order to establish and sustain relations at a wide organisational level. Otherwise, ethnographic research becomes subgroup research without stating it being this and accordingly loses its credibility.

2.4.6. Fieldwork and internal organisational conflicts.

In organisations with ongoing internal conflicts, the researcher challenge to obtain rapport with conflicting groups and individuals will be a difficult one to live up to. Mouly and Sankaran (1995) point to the difficulty of maintaining a state of researcher "neutrality" due to a probable researcher preference for one or some parties' arguments, and also due to the not uncommon situation that organisational actors will try to use the researcher to achieve their ends in ongoing conflicts. The researcher will easily be dragged into organisational politics and power battles if she is not extremely aware of this danger. If she is being accused for taking sides in an internal conflict, then her possibilities for gaining broad psychological access in the organisation are about zero. Organisational members will quickly spot a researcher preference for certain individuals and groups in an existing conflict, and this will cause restricted access to other individuals and groups. During a long fieldwork period, this scenario is likely to become a reality for most fieldworkers.

When being conscious about one's tendency to prefer the points of view of one of the battling parts, chances are that the researcher might be able to "manage" her biases better than if the biases are not acknowledged. To dull oneself into a sham of being neutral is probably worse than anything, and it may lead to a potentially damaging unawareness concerning one's own research process. An organisational ethnographer who wants to reveal organisational actors' values and beliefs has to be willing to recognise her own values and prejudices in the daily research process. Organisational groups and individuals will want to establish whether the fieldworker is trustworthy when it comes to "keeping the secrets" one is allowed access to. During my own fieldwork I was told that in the first phase of my fieldwork period, organisational members had been attentive if insights I gained about sensitive organisational issues were being fed to other members by me. "If we had found that this was the case, then it would have meant the end of your stay here," I was told. To comply with a fieldwork promise of confidentiality is not always easy, especially when fieldwork extends over a long period of time and the fieldworker inevitably becomes attached to certain groups and individuals. A slip of the tongue might easily occur and likes and dislikes may not always be held in

check. For a fieldworker who has been granted access to organisational backstage regions, this is an issue of main concern, as it might be anticipated that the fieldworker ought to reciprocate backstage information with information from other organisational groups' backstages.

2.4.7. Non-symmetrical relations between researcher and informants.

The issue of fieldwork ethics is a vital question for ethnographic researchers, and ethical questions will constantly claim researcher attention. Ethical dilemmas and questions may at times become so overwhelming that they are in danger of ruining the research process, but it is my belief that it is better to have an awareness of ethical issues than living in a state of ethical ignorance and unawareness.

An ethical dilemma that I increasingly recognised as a fieldworker was what I perceived as the non-symmetrical relations between my informants and myself. I was fortunate enough to establish a position in which I was accepted and included by the majority of organisational members in their daily work lives as a fellow human being, not only as a researcher. I was admitted into many organisational backstages, I was treated generously and respectfully, and organisational members gave to me in abundance what I mostly craved for: their definitions of work place safety reality. I was happy that my relationship building with my informants had succeeded, but my "success" had a bitter aftertaste which confronted me with uncomfortable ethical considerations.

My "consciousness problems" had to do with the personal relationships of friendship that developed. I strongly felt that emotional relations were "uneven" in the way that they were constructed around friendship intentions (and pretentions?) on my part in order to benefit my data collection. Without qualms, I had utilised my social abilities to gain people's trust, and as time passed, I felt increasingly uncomfortable by what I had achieved. Punch (1986) talks about the fieldwork establishment of friendship with people one normally do not mix with, and how a fieldworker might exploit emotional involvements in order to get data. During my fieldwork period I experienced similar feelings which made me reflect over the non-

symmetrical relations in which I saw myself as the chief beneficiary and my informants to be those who were the main providers.

All social interactions must contain positive incentives in order to take place. So what were the incentives in our relationship building from my informants' point of view? What are the reciprocal aspects of such relations that make them seem worthwhile for both researchers and informants? By reflecting about such questions I hoped to gain insights about the felt non-symmetrical field relations.

2.4.8. Why do informants participate in research?

So why are informants willing to share their knowledge of organisational issues and even friendship with strangers who come and go and who possibly have no real interest in them as human beings except as organisational informants? Why do they let themselves be "exploited" to provide the raw material for books and dissertations that they probably never will read through the patient enduring of ethnographers' obtuse questions (Geertz 1993b)? I find it hard to believe that informants pay much heed to researcher assertions of the general benefits of research and knowledge production. There have to exist more specific advantages for informants in order to account for their willingness to become involved in fieldwork research.

As I pondered about such questions, some answers began to appear which "comforted" me in my ethical concerns. I was told by some informants that it was significant for them that I seemingly was genuinely interested in listening to their perceptions of safety and work life. "Nobody has ever asked me before about my points of view concerning safety issues", one informant said. He had worked at the site for many years. So what I seemingly provided to informants was a "Speakers' Corner" in which their own work experiences and perceptions had priority and were of prime interest.

Also, I was told that my interest in safety issues contributed to the sustainment and development of the organisational safety focus. It was believed that both management and employees were more conscious about safety issues while I was

around and that my presence thus promoted a continuous safety awareness. So what they gained from giving me access was a strengthening of the safety focus, some said. It is my impression that this part of my field role was most predominant during the first stages of my fieldwork period before I blended more or less in with the daily routines. At the outset of my fieldwork, some organisational members even thought I was a kind of safety inspector.

Whether being an academic in a non-academic environment was a qualification that furthered or hampered my fieldwork relations is difficult to decide upon. What was said by some, though, was that my academic status served to emphasise the safety focus as an organisational issue. The "scientification" that my presence awarded to safety gave the issue a more prestigious position, it was said.

For some of my informants, I served as a "wall of grief". Those who were dissatisfied with work conditions found in me a patient and nonjudging listener, and at times they might have looked upon me as a "channel" into which they could send grievances with the hope of these becoming further transmitted through the organisational structure. To volunteer information to a fieldworker thus may become a political strategy to informants who might consider closely what information to give out and what not to give out in order to promote her own political interests. I also became a discussion partner for some informants who wanted to debate organisational issues with me and who apparently appreciated my "stranger value" (Goldstein quoted in Jackson 1987:69) in the evaluation of diverse organisational matters.

As I considered the issues of fieldwork relations, I had to admit to myself that although these very "worthy" explanations all could be found in my fieldwork relations, the main reason why informants included me in their daily work life probably was my role as "refresher-of-the-day". I go along with Barley (1983) who found that the main significance of his attendance at the fieldwork site was related to informants' general boredom and curiosity towards a new and strange "phenomenon". Numerous times organisational members commented upon the monotony of their work tasks and how their days consisted of the same

unchallenging routines. It was frequently said that good social relations were vital in order for people to endure the tediousness of the work day, and any event and "refreshment" were welcome to break the monotony. As a fieldworker, I constituted such a "refreshment". The fact that I was a woman and my fieldwork site was an overwhelmingly male work environment probably also enhanced my "refreshment value".

A final point of reflection about why organisational actors find it worthwhile to invest in a positive relationship is the emotional bonds that the fieldworker might develop towards the fieldwork site and organisational members. I know myself that as time passed, I became quite attached to this place of work, and I identified with it in a way that overshadowed my research interest in safety issues. Hopefully without sounding too much like a cliché, I developed a genuine interest in the organisation and the people who worked there, and accordingly, I believe I fulfilled two "success criteria" for good qualitative research: an ability to relate to others on their own terms and a passion for what I was doing (Taylor and Bogdan 1984). I enjoyed being with the people at the fieldwork site and cared about them. I am quite certain that this personal involvement of mine was an aspect that promoted my positive relations with many of my informants. They liked that I liked them, to put it simply.

But even so, I never got rid of the uncomfortable feeling of "exploiting" my informants for my own purpose. I go along with Punch when he takes as his own view the point made by Fielding (1982; quoted in Punch 1986:73) that once you have gained the confidence of your informants, you begin to con them. Even if I wanted to believe there existed a mutual relationship between my informants and me, this was only true to some degree. I was different to my informants in most ways. My particular status was emphasised by the fact that I could come and go as I pleased and that I would leave the fieldwork site when I considered myself finished with my data collection. A Norwegian proverb depicts the impolite person who leaves a house as soon as she has achieved what she wants. As I got to know my informants as human beings, I felt more and more like one of these rather rude persons. When I was satisfied with my data amount, I would go back to my

academic life and discuss the work lives of my informants as "interesting organisational issues".

My only way of giving something back is to write a thesis in which my informants become materialised as more than mere "safety objects". I hope I will be able to do my analysis in a way that does not "dehumanise" them by making them stand forth as mechanical organisational actors and statistical "events" only. Taylor and Bogdan (1984) argue that the chosen methodology when studying organisations necessarily affect the way researchers come to view organisational members. It is my conviction that an ethnographic approach has a potential for bringing alive the people of the organisation, and I hope I will be able to take advantage of this methodological strength in my work process. I am fully aware of these statements of mine being very ambitious, but I am confident that my theoretical perspectives and their quest for a polyphony of organisational voices are the best tools in order not to reduce my informants to numbers and safety events.

2.4.9. Ethnographic fieldwork and analysis.

A point of much concern in ethnographic research is the way the data material is to be analysed. Mouly and Sankaran (1995) refer to Spradley's (1980) "The Ethnographic Research Cycle" in which a cyclic pattern of ethnographic research is outlined. This cycle consists of research phases that occur and reoccur in non-linear movements and which include the selecting and asking of questions, the collecting of data, the making of records, the analysis, and the writing out of the ethnography. What distinguishes the ethnographic work process is the non-linearity in research design and aspirations. It is impossible to follow a streamlined research design from beginning to end, and in my view the mere thought of such a procedure violates the essence of ethnographic methodology. If a main issue of ethnography is to obtain a multifaceted picture of organisational life and to build the study upon multiple definitions of this reality, then the research design has to be flexible and open to new discoveries and interpretations.

Many researchers point to this cyclical quality of ethnographic research, and it is emphasised that it is never possible - or desirable - to distinguish strictly between the different conceptual stages. New questions of analytical relevance will appear as new data are revealed, and forthcoming theoretical insights will cause new questions to come forward. There is thus never an end to the researcher need for further data and continuous analysis. As more insight into the processes of organisational life is gained, the stronger the need to know more becomes accentuated. During the course of fieldwork and analysis the initial research idea may even become completely altered as data findings may make it clear that the intended research issues are of less relevance than was first expected. Turner (1994) quotes Pidgeon et al. (1991) who argue that the criteria of data relevance in qualitative research develop during the process of analysis. Thus it is evident that there must exist a closeness between data collection and analysis. This is echoed by Bryman and Burgess (1994b) when they state that it is a common view in qualitative research - and consequently also in an ethnographic approach of study - "... that analysis is continuous in that it interweaves with other aspects of the research process" (p. 218).

Wolff (1976; quoted in Turner 1994) advocates a "surrender and catch" approach to organisational research in which he promotes an initial non-directed openness while in later research phases he will scrutinise his "catch". Wadel (1991) talks about "the dance" between theory, methodology and data in ethnographic research and points to the need for continuous consideration of the interaction between different aspects of this process. An awareness of not being static and closed to new perspectives is what is called for in order to perform this "dance" of ethnographic research.

Several research dilemmas arise from these research ideals, though. Questions have to be stated of anyone's ability to be so flexible in thought and research methods as is outlined here. It does not seem unreasonable to suspect the existence of a gap between espoused theories and theories-in-use in ethnographic research, although this probably often will not be openly admitted even if the ethnographic dance has been rather stumbling. The prescribed interactions between research aspects in an everlasting cyclic movement may be very difficult to cope with in a complex

fieldwork situation. It may lead the researcher to feel overwhelmed by experiencing constant ambiguity and preliminary discoveries which all the time require new methodological and theoretical considerations. "Results" are never reached in any substantial way, and both internal and external expectations may make the researcher "cheat" on epoused ethnographic values of flexibility and cyclic research in order to ease a pressure for research "results". Even ethnographic research has to come to an end, and it seems doubtful that the cyclic stages of ethnographic research are possible to carry out during the entire course of fieldwork.

2.4.10. Grounded theory and ethnomethodology.

The concept of "grounded theory" (Glaser and Strauss 1967; Strauss and Corbin 1990) is central in many ethnographers' research approach. Glaser and Strauss (1967) argue that a priori assumptions at early research stages serve to mask important features of social reality, and in order to counteract such unsatisfactory research development, they have developed their specific analytical approach. Grounded theory stands for theorising to be developed inductively through the study of the actual organisational phenomena. The ideal stance is to let the area of research determine what are relevant themes of investigation and to conceptualise and construct theories which are steadily "grounded" in field data only.

According to Locke (1996), the following traits characterise a grounded theory approach: "It must *closely fit* the substantive area studied, be *understandable* to and *usable* by those in the situation studied, and be sufficiently *complex* to account for a great deal of variation in the domain examined" (p. 240). Organisational actors' own constructs of their reality will thus be of prime research concern. What are perceived as relevant issues among those who have firsthand organisational experience have to dominate the research agenda, it is argued (Isabella 1990; Strauss and Corbin 1990). The task of the researcher becomes to explore the organisational situation in order to "catch" the areas of research relevance, to obtain data, and to analyse the data in accordance with a set of analytical rules that is spelled out in elaborate steps for data coding and analysis. The constant contrasting

and interweaving of data collection and theorising are cornerstones in grounded theory procedures (Locke 1996; Isabella 1990), and the problem of researcher interpretation (and possible distortion) during the analytical process is hoped to become minimised due to the proposed rules of analytical mode – although in later years, Glaser and Strauss have disagreed strongly between them about the role of the researcher and subsequent researcher influence on the studied phenomena (Locke 1996). But since grounded theory aspires to develop theory and not only to offer descriptions, it is by most grounded theory-oriented researchers considered necessary to "intervene" in the immediate categories emerging from the data material with analytical concepts for the development of theory. It is believed that grounded research procedures makes it possible simultaneously to be true to the data material and to develop credible theory.

That the concept of grounded theory has a strong impact on qualitative research can be seen from the frequent referrals to the methodology in research methodology literature. Bryman and Burgess (1994a) state, though, that there exist very few research works in which the specific approach and rigorous procedures of "purist" grounded theory actually are fully utilised. They argue that grounded theory probably is given a large degree of lip-service (p. 6), and that its main importance in organisational research can be found in the influence it exerts when emphasising development of theoretical constructs based in the existing data material. Locke (1996) also questions whether many researchers simply use Glaser and Strauss' (1967) theories to add legitimacy and a stamp of approval to their own work rather than elaborating on how they in fact have practiced a grounded theory approach in their research endeavours.

Grounded theory as it is outlined by Glaser and Strauss (ibid.) has not constituted a part of my approach to fieldwork and theorising as I have not followed the research procedures that is spelled out by its creators. As many others doing qualitative research, I have found the grounded theory "rules" too rigorous to cope with in my research effort. When I in spite of this finds it relevant to discuss grounded theory, it is because grounded theory with its focus on organisational members' constructs and its theory building based upon the constant interweaving between data

collection and emerging conceptual categories has been an inspiration to me in my work. I like to believe that although I by no means can claim to have utilised grounded theory procedures, the "spirit" of grounded theory has been present and made me acknowledge a multiplicity of reality definitions that I have found at my fieldwork site. It seems to me that an ethnographic research process in which a "discovery of problems" is a core objective (Emmet and Morgan 1982; quoted in Whight 1994) is not far removed from major assumptions in a grounded research approach.

Ethnomethodology – the approach to organisational research which is developed by Garfinkel (1967) – has also been an inspiration with its emphasis on the mundanity, the routines and the taking-for-grantedness of work life and social interactions. Garfinkel stresses the necessity for organisational research to concentrate on how people make meaning in everyday activities, and he urges researchers to explore the commonsensical qualities of everyday life with a "stranger perspective" in order to understand the meaning constructions that continuously take place. I find an ethnographic fieldwork to have the potential for investigating into the non-spectacular taken-for-grantedness and subtlety of organisational life.

2.5. Ethnography and authorship.

A main question of ethnography is how to present one's findings in a final document which encompasses both a livid picture of organisational life – to recreate the feeling of "being there" – and an analytical approach to the chosen research theme.

I have previously argued that no research is value-free and neutral, and that researcher theoretical preferences, the choice of research theme, the manner in which data collection is carried out and the final construction of the research report all will influence the research results. The research results will thus not be "objective" results from an "objective" reality, but will be filtered, interpreted, described and analysed through the researcher as the intermediate channel. Ethnography is about the mediation of organisational frames of meaning through

the ethnographer's own meaning constructs - and with an audience with its multiple frames of meaning at the receiving end (Agar 1986).

It is during the writing process that the researcher power becomes evident as she decides upon how to present the data material and her analytical findings. In my view, there is no reason for trying to "hide" this situation as it is seemingly attempted in research accounts where it is impossible to find the author's presence in the text. I have always wondered about the utilisation of the pronoun "one" in academic texts. I find it strange that authorship is not acknowledged by the pronoun "I", although I know that academic "rules" with their emphasis on "neutrality" account for this practice. I think the Humpty Dumpty approach shows a good understanding of what really is going on in the writing of research accounts: "'When I use a word,' Humpty Dumpty said in a rather scornful tone, 'it means just what I choose it to mean – neither more or less'" (Glendon 1988:87). Based in our subjective realities, we all choose our words and the meaning constructions we apply to them. Researchers are not exempted from this.

I follow Alvesson and Berg (1992:215) when they point to the obvious fact that both researcher and reader are included in the research context as actors. It is my firm opinion that the researcher as an author plays a significant part in the research process whether she likes it or not. An ethnographic research report will be an account of what I as a researcher have perceived the informants to perceive and which enables the readers to perceive the informants' situation – but notably seen through my eyes (Gagliardi 1992). As a researcher and an author I have much more influence over the public interpretation of what went on in my chosen organisation than do the organisational members of my research site (Bartunek and Louis 1996). According to Smircich (1985), a goal of interpretive research is to put the author back into the text as the one who authorises the account. The researcher subjectivity will thus be made visible, and research integrity will be established during this acknowledgment of what goes on in a research process.

It will be through a text that is construced by me – the author – that the organisation and the analysis hopefully will come alive. My choices as an author includes the

decision of how much prominence to allow the author in the text. Some post-modern writers allow the author little space and concentrate upon the presentation of organisational reality as scattered and incoherent - deconstructed - pictures arrived at by direct quotations from informants (Martin 1992). This approach calls for an obliteration of the traditional author authority and argues that it presents organisational reality as it "is" rather than through the author's eyes, and it claims to leave the reader to do the interpretation. It can be asked whether this way of presenting organisational data in fact is less "authoritarian" than a more author focussed approach. Even if organisational actors are given a "direct" voice and is not "translated" by the researcher, it is still the researcher who structures the text and selects what is being presented and not presented. I find that the author is just as "invisible" but still solidly present here as in traditional scientific works.

Also, if a research goal is to reproduce organisational voices without attempting to analyse the organisational situation that emerges, then I find reason to question the whole rationale of organisational research. I agree that the multitude of organisational voices have been silenced to an unacceptable degree in much research and that research results have lacked organisational representativity. But the acknowledgment of this situation is a far cry from refusing to interpret and analyse organisational data at all. If a complete surrendering of author authority is the answer to author dominance, then the scales seem to have tipped in favour of another pitfall in organisational research.

It is my conviction that in order to understand organisations it is necessary that researchers do interpret and analyse the data material they have collected instead of just presenting the data as bits and pieces of a deconstructed organisational reality. Thus, I will not stand forward as a very post-modern writer as the author authority will be present in my work. The next pressing question will then be which type of tale I will choose to write. In other words: Which type of author authority do I regard as the "best" in order to do most justice to my research process and my data material? I turn to Van Maanen and his "Tales of the Field" (1988) to explore this question.

2.5.1. The realist tale.

Realist tales are defined as being accounts where some invisible author reproduces the fieldwork setting through detailed information of what goes on at the fieldwork site combined with an abundance of quotes from organisational members (Van Maanen 1988). Author authority is established through the narrative's "being-on-the-spot" character, although the author herself is seldom visibly present either at the fieldwork site or in the text. In the end, though, it is the invisible ethnographer who interprets and analyses the data material. The lone and authoritative observer who has "got to the heart" of a particular organisational culture has a long tradition in ethnographic works (Jeffcut 1993:35).

The realist tale has been criticised for the absence of a visible and self-reflective author voice. It is argued that the realist narrative has much in common with a traditional research account in the way it portrays the organisational situation as an "objective fact". Not much concern seemingly exists about how the researcher's theoretical perspectives, her data collection approach, and her selection of research themes and analytical categories have influenced the ethnographic tale.

With their nonambiguous findings and clear research results, cultural analyses in which the integration or the differentiation perspectives (Martin 1992; Frost et al. 1991) are utilised as main analytical tools seem to "fit" into the realist style of writing. There is not much room for reflection about the research process and subsequent possibilities of unclarity and doubt when doing research from these perspectives. The realist style with its "being-on-the-spot" and "objective" author authority will thus serve as a suitable instrument for ethnographers choosing these research paradigms.

2.5.2. The confessional tale.

The emergence of the confessional ethnographic tale may be looked upon as an answer to this critique. In Van Maanen's (1988:67) words, a central theme in a confessional tale is the exploration of how the fieldwork has been accomplished.

Such a tale includes a detailed account of how the researcher coped with the fieldwork situation and also reflections about how the researcher evaluates her own pre-set theoretical perspectives, choice of research theme and methods of fieldwork to have influenced what she "saw" during the fieldwork period. According to Van Maanen (ibid.), a typical trait of confessional tales also is a display of empathy and involvement with informants, and this involvement is discussed as a source of influence on data collection and analysis.

If in classic ethnography the anthropologist was considered a hero who obtained rapport with strange tribes, confessional tales portrait the ethnographer as an anti-hero who is an ordinary human being, and who strives to cope with a fieldwork situation that is personally and professionally demanding. But in the end, though, it seems that the confessional ethnographer produces a tale that is not very dissimilar to the realist tale. This seems to take place even though many confessional ethnographers differentiate themselves from realist authors by stating that the fieldwork experience is not purely observational and descriptive but rather an interpretive situation in which the fieldworker's interpretation of what takes place at the fieldwork site is a central part of the research process.

The confessional features of an ethnographic tale may come forward in a separate chapter, in an appendix, or be engrained in the text throughout the whole tale. The purpose of the confessional style is to give authority to the tale by way of pointing out the author's awareness and reflections during all parts of the research process. This is supposed to give the author a kind of moral authority vis-à-vis the readers. The emphasis on the researcher in confessional tales has been criticised for its self-absorbing "ego focus". It is apparently rewarding for a researcher to discuss fieldwork circumstances, and this might appear as a tale in itself without clear connections to its influence on the research process. It is also questioned whether this constant awareness of researcher perceptions, biases, motives, and fieldwork relations may lead to something of a paralysis regarding the analysis of the data material. Van Maanen (ibid.) calls for a balance between introspection and the objectification of fieldwork data. An introspective focus is necessary, but if this becomes the central issue for the researcher, then the research focus has shifted.

2.5.3. The impressionist tale.

The last type of ethnographic tale that Van Maanen (1988) discusses is the impressionist tale. The essence of this tale is a thematic and literary construction which focusses on the "doings" of the field. This is achieved by the telling of stories which depict fieldwork situations in imaginative ways. For the author the essential issue is not to present a complete interpretation of the field, but to make the audience relive the ethnographic experience. Although the impressionist tale inevitably is being established by means of the fieldworker's eyes and conceptions, this type of ethnography is open to interpretations in many directions, and the author does not present herself as the sole interpretive authority.

Impressionist stories have features that may be likened to the Impressionism school of painting. According to Oxford Advanced Learner's Dictionary (1989), the Impressionist style is a way of painting that "... creates the general impression of a subject by using the effects of colour and light, without realistic detail" (p. 625). The "colour and light" of the impressionist tale is stories told in a manner that may resemble a novel - and not an epic novel, but one which is fragmented and noncoherent. An impressionist tale hightlights the episodic, the complex, the casual, and the ambivalent issues of fieldwork occurrences, and Van Maanen (1988:117) talks about "kitchen sink" reports – reports into which one dumps all sorts of events in a rather "illogical" manner – when he discusses characteristic features of this tale.

It seems to me that the impressionist tale must be the preferred way of writing post-modern ethnography. Ambiguity, doubt, and multiplicity characterise a post-modern approach to organisational research, and this epistemological stance probably will be most satisfyingly represented by an impressionist way of writing. Concern for the traditional "rationality" image of a tale does not occupy an ethnographer who is based in this paradigm as the dramas of the field cannot be represented in a "rational" way without doing injustice to a post-modern reality perception. What is important is that the story attracts the reader and that it gives a "true" picture of an ambiguous reality.

Due to the shared emphasis on ambiguity and multiplicity, an impressionist tale would also seem to be a "natural" medium by which to present a culture fragmentation analysis (Martin 1992; Frost et al. 1991). Furthermore, the writing style's refusal to give the author exclusive interpretive authority is another ideological aspect that links the impressionist tale and the fragmentation perspective.

I find the author authority in an impressionist tale to be based in the manifestation of complexity and incoherence. If the readers accept the basic perception that organisations are not orderly, rational and easily understood, then the ambigiuties and complexities that make up impressionist accounts will be valued. The reseach honesty of being unsure will then be taken as a hallmark of quality, and the author authority is established through quite opposite means than those of the realist tale.

I admire impressionist writers of two reasons: Firstly, I consider an impressionist writer who writes her tale in an engaging manner to possess artistic gifts – or handicraft competence – of writing that are not commonly found in research reports. This style of writing eliminates the boredom that may be felt when reading realist and confessional ethnographies. Secondly, I admire them even more for their courage. I find it brave to write impressionist tales in an academic world where the mode of writing (and thinking) is dominated by "realism". Impressionist writers are "strange birds" in mainstream academia, and their authority may not be very strong in dominant organisational research circles. I assume that being an impressionist writer does not promote an academic career particularly well, and I appreciate researchers who nevertheless stick to their convictions and produce ethnographies that meet their own standards of thought. I consider impressionist ethnographies to be important thought-provokers for ethnographers of all brands, and I believe we will gain vital ethnographic insight and reflections from impressionist writers.

My critique of impressionist tales has to do with my previously cited scepticism about representing organisational "reality" as a fragmented state of affairs that denies almost any interpretation at all. But in spite of these objections, I consider

impressionist tales as important reminders of not to be too sure that I have found all answers in my own analysis and writing. I need such reminders all the time.

In summing up this discussion on ethnographic authorship, it is vital to emphasise that writing style is not a purely technical matter, but that the choice of style reveals much about the theoretical base of the research work. What is commonly found in ethnographies is a blend of styles that corresponds to a researcher's mixed epistemological approach to her work. "Pure" examples of the mentioned styles are less often to be seen in ethnographic accounts.

2.6. My tale.

So what about myself? What type of author am I? This is a tough question, and one which I have tried to avoid for a long time. But I have to admit that I probably am an eclectic type of writer who wants to harvest what I consider the best from different writing styles. My ambition of doing a multiperspective analysis is paralleled by a wish to utilise more than one style of writing.

I want to be a realist writer in order to produce an ethnographic account which gives the feeling of "being on the spot" and I also want to interpret and analyse my data material and present research results. But I will not do this by pretending to be an invisible author who appears to have no reflections about my own influence on the fieldwork situation and the research results. What I have previously written about general theory and methodology includes many reflections and discussions about my own role in the research process, and such an approach leads my tale in a confessional direction. But I do not want myself to appear as the main actor of the ethnography. And although I will not utilise an impressionist style in my writing, I need the existence of this approach as a constant reminder of the danger of becoming too simplifying and too smooth in my representations of organisational life. Finally, I would like very much to write a tale that is not boring – but I do not know if I am capable of this.

For an author, the question of who constitutes her audience is a vital one. In order to be understood and hopefully valued, the writing style has to comply with the audience's expectations. For the researcher, the audience is the last chain in the research process as the work is not finished before the "results" are being communicated. It is through audience participation that new knowledge is introduced into the research field and thus becomes meaningful for a larger audience.

Academia is the most important audience for research reports, whether we like this or not. It is among colleauges that our research reports are read and evaluated, and the writing style of a researcher will have to reflect this fact. Due to this, I fear that the wish of some ethnographers to write an account that is readable also to her "natives" might wane as time passes and that accordingly, ethnographers may experience that their informants feel rather estranged if encountering the final product. This question of "writing for whom" is a dilemma that I find somewhat insolvable myself, as I want to write an academic account, but at the same time I feel a debt to my informants to write something that they will find comprehensible and relevant. In optimistic moments I have been able to persuade myself that I would find the time and stamina to write two reports for these two different purposes, but I have to admit that this optimism has proved to be unrealistic. At present I do not know how – and if – I will be able to repay my informants by presenting them with a written piece that will make sense in their situation. Sometimes I hope that as time passes, my informants literally will forget me, and that their interest in my forthcoming product thus will disappear.

Another issue to take into consideration is what to write about and what not to write about. In data collection, confidentiality is commonly promised as a means of obtaining information, and it is an ethnographic credo to keep these promises. Even so, Punch (1986) states that although confidentiality is seriously attempted by the researcher in her writing process, it may nevertheless be impossible unwillingly not to reveal specific identities when describing organisational traits and processes.

When the research report is fed back to the organisation, it often is quite easy for internal actors to identify organisational members and the information they have revealed to the researcher. When data concerning internal conflicts surface I find it an ethical dilemma how to present this information in the finished report. It is important to me that my informants do not have to experience unpleasant situations due to being identified as "betrayers" of organisational secrets. Accordingly, such "hot" data have to be handled with discretion. Punch (1986) discusses confidentiality and research "honesty" in the writing process, and he concludes that no easy answers are to be found. The same dilemmas are also dealt with by Whyte and Whyte (1984), and their answer is to find a middle way between a practice in which all bits and pieces are published disregarding its possible consequences and the avoidance of publication at all. Concern has to be paid both to the protection of one's informants and to the question of presenting the organisation as "truthfully" as possible. My solution will be to avoid the quotation of perceptions that I consider harmful for informants' position at my fieldwork site.

I believe it is an impossible task to write an ethnographic account that is appreciated by all organisational actors at the fieldwork site. Organisational issues that organisational members rather would have seen unmentioned may be disclosed in such a report, and the researcher perception of "reality" will not be in accord with all members' own reality constructs. Such dissonance is to be expected as a "trade mark" of ethnographic research and should not be allowed to bother me to any significant degree.

Smircich and Stubbart (1985) argue that in interpretive research, the traditional cause-effect logic of research has to be downgraded in favour of examining the rules that people follow. This research is not interested in the construction and testing of hypotheses, but emphasises the understanding which is developed through the exploration of organisations. The ethnographer does not subscribe to a scientific testing role, but rather to a learning role in which the abandonment of traditional scientific control is central (Agar 1986).

I agree with these statements, and accordingly, I will not attempt to construct any "grand narrative" or general theories out of my field data. Geertz (1993a) argues that what ethnographers should hope to obtain is "local knowledge" based in a recognition of the complexity and uniqueness of the culture under study. He states that there are enough general principles in the world (p. 5) and argues for the development of localised knowledge: "... much is to be gained, scientifically and otherwise, by confronting that grand actuality rather than wishing it away in a haze of forceless generalisations and false comforts" (p. 234). So instead of trying my hand at a grand narrative, I want to write a *local* narrative where local knowledge is at the focus of interest.

That the local knowledge I develop might include aspects which will be of general interest is to be hoped. But first and foremost, my goal is to produce knowledge which pertains to the safety situation at my chosen fieldwork site – nothing more and nothing less. "Wisdom comes out of an ant heap" says an African proverb (Geertz 1993a:167). This phrase catches my vision of creating local knowledge through a study of a multiplicity of complex and simple patterns of organisational interaction.

The other – and less pleasant – side of the coin when focussing on local knowledge has been a worry of mine throughout this work that I would not be able to produce "smashing" new knowledge concerning safety. Such expectations are prevalent in academia, and I have also encountered the same expectations at my fieldwork site. My focus on the mundanity of work life and the rather "ordinary" circumstances of my fieldwork site have caused me anguish when thinking about my "results", as they probably will not be causing earthquakes within the field of safety research. Will I be able to develop a punch line which gives the research a point (Bate 1997) or a story-line – an analytical thread – that unites and integrates the major themes in my data (Taylor and Bogdan 1984:136)? Will I be able to present new insights concerning organisational safety issues?

I have neither spectacular, bizarre nor particularly unusual organisational events and processes to report about. At times I have feared that "the ant heap" approach may

be both boring, uninteresting and irrelevant for knowledge production. But I have found comfort in researchers like Mehan (1979; quoted in Mouly and Sankaran 1995) who argues that he does not see the purpose of his ethnographic research to be the presentation of unexpected findings. Rather, he sees "... a major purpose of ethnography to be the presentation of information that the participants themselves already 'know' but may not have been able to articulate. Such ethnography may reveal patterns of interaction that surprise participants or scientists, but surprise is not the criterion of value" (p. 46). So at the end of the day, I still believe that my polyphonic and mundane perspective of analysis represents the potential to create at least a tiny bang in safety research.

Alvesson (1993) states than when exploring organisation as subjective experiences, the research necessarily will lose in supposed practicality. If the research focus is on organisational processes seen from multiple actors' points of view and includes organisational ambiguities and unclearities, then a traditional utility concern has to be neglected in order to be able to commit oneself to this approach, Alvesson argues. The benefit of such a study is to be found in the way it focusses on organisational complexity in order to promote a comprehensive understanding of diverse organisational mechanisms (Alvesson and Berg 1992). Ethnographic studies "... don't know where they are going to end up; they don't predict the future" (Agar 1986:16). This approach collides with a wish to find straightforward explanations and practical solutions. The irony of the utility debate of organisational research, though, may be – according to Smircich (1983) – that research that tries hard to be useful may in the end be less useful than research that does not try so hard to achieve practicality. It can never be known until a study is finished what its utility achievements will be as different audiences will have different evaluations of what they consider useful organisational knowledge in a research report.

I find my own views accurately articulated in these statements (and maybe I also find some consolation). The news value and the utility value of my research will first and foremost be found in my approach of study and what this approach is able

to reveal based in the perspectives of multiple organisational rationalities. My main story and my punch line will be my approach to the investigation of safety.

2.7. A tale of thick description.

According to Geertz (1993b), what defines an ethnographic research effort is the utilisation of thick description in all phases of the research process. A "thick" description is different from a "thin" one in that it details not only organisational actions in an almost microscopic manner but also organisational members' – often multiple – meaning constructs of the actions, all of this embedded in the organisational context where it takes place. This means that thick descriptions of organisational actors' doings will be cast in the terms that they themselves place upon what they experience, "... the formulae they use to define what happens to them" (Geertz 1993b:15). Geertz goes on to argue that if anthropological analysis constructs a tale of what has happened only to divorce the tale from what actually *has* happened – "... from what, in this time or that place, specific people say, what they do, what is done to them, from the whole vast business of the world ..." (p. 18) – then, the tale becomes vacant. A good ethnographic account, however, takes the reader into the heart of the issues which it sets out to comprehend and interpret. The venture of thick description is the essence of being an ethnographer and is unseparable from cultural analysis, says Geertz.

The backbone of this research work is the data I have come up with during my fieldwork periods at my chosen organisation. These data will form the basis of my ethnographic account, and it is my aim to produce a tale of thick description along the lines of Geertz' definition of the term.

In order to be able to construct a tale where a multiperspective approach on organisational safety is the focus of attention, I will necessarily have to dive broadly and deeply into the multiple safety perceptions that were offered me by organisational members. Since such actor perceptions are considered more than vital within the theoretical and methodological frameworks that I have established my research within, it is obvious for me that thick descriptions of organisational

events will have a dominant place in this tale. So in the spirit of grounded theory and ethnomethodology as well as Geertz, I will reproduce organisational actors' subjective and situated safety rationalities for my readers in order to guide them on a journey through my sensemaking which in its turn is based in the sensemaking processes of multiple organisational actors.

Thus, I will work and rework my data material from many angles and perspectives. I have to do this if I am to reach my stated research goal of establishing and analysing an organisational safety reality which takes into account a complex web of safety representations and enactments. Despite of the "danger" of a possibly repetitious character and a resulting state of reader boredom due to such an approach, I see no other way of conducting my analysis and writing my tale. Multiple perceptions have been at the core of my work, both theoretically and empirically. Then it is evident that they have to be at the core of my tale as well. A tale of thick description it will be.

SECTION B

CHAPTER 3

FIELDWORK AND DATA ANALYSIS

3.1. Introduction.

My focus in this chapter is to outline my fieldwork and data analysis process. I will start with a presentation of my fieldwork site and the work hazards that organisational members experience in their work life. Then, I will describe how I collected and interpreted my data material. Included in my account will be a discussion of fieldwork relations and how these relations may have affected my research process. Due to the small number of women at my research site, I choose to use male pronouns in my account from the site irrespective of my informants' actual gender. This is done in order to prevent the female organisational members from being recognised in my text.

3.2. My fieldwork site.

Magnum Aluminium Industries (MAI) is a pseudonym for a Norwegian aluminium plant. It was established in 1967 and employs about 1500 people. MAI is part of the aluminium division of Magnum Industries which is a large and diversified corporation.

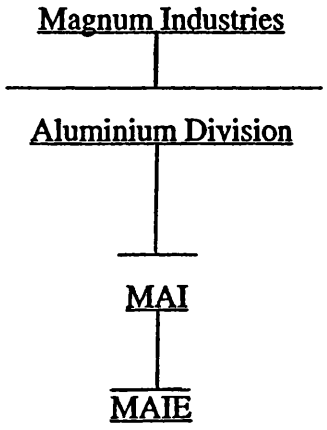
During the last 10-15 years, changes in the formal structure of the plant has taken place. Departments that are not involved in the production process of raw aluminium have been separated from MAI and been included in new organisational structures in the aluminium division of Magnum Industries.

I chose as my fieldwork site the extrusion department of the formerly integrated MAI. Since 1988, this department - called Magnum Aluminium Industries Extrusion (MAIE) - has business-wise been a part of Magnum Industries' National Extrusion Group which has its headquarters in a different part of Norway. The central management team and staff functions dealing with sales, marketing, and finances are located at headquarters. The National Extrusion Group is included in Magnum Industries' Extrusion Group which consists of companies in several European countries and is headquartered abroad.

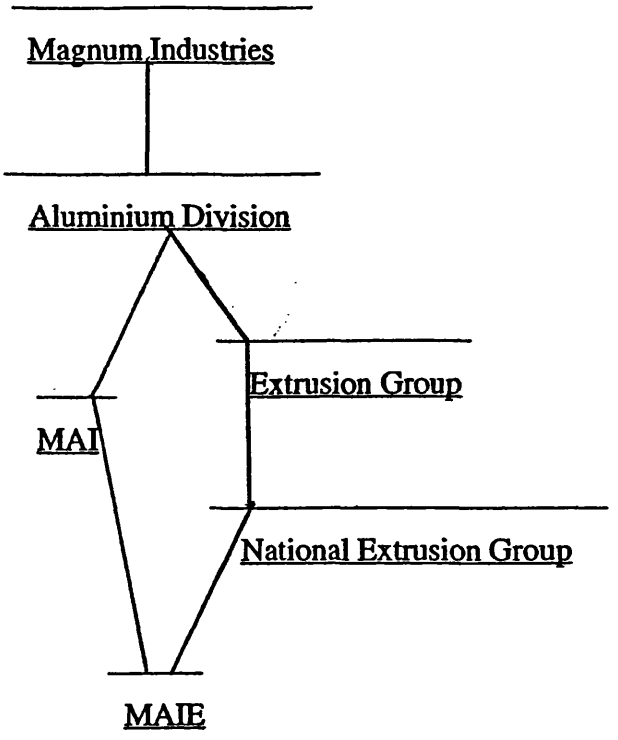
On January 1, 1994, MAIE was established as an independent company within the structure of the Magnum Industries' National Extrusion Group. From this date, MAIE has no longer any formal ties to MAI. But due to the physical location within MAI's plant area, it was decided that MAIE was to maintain some coexistence with MAI concerning personnel, trade union, and Health, Safety and Environment (HSE) issues.

MAI is reputed to be a pioneering safety company in the Norwegian onshore industry (Lindøe 1992; Tungland 1992; Lindøe et al. 1991; Rasmussen 1990), and it has been presented with national awards for its safety approach. The last award was received in 1993. In 1995, MAIE was the winner of a regional safety award. The same year MAIE also was named HSE Champion of the Year within Magnum Industries' Extrusion Group.

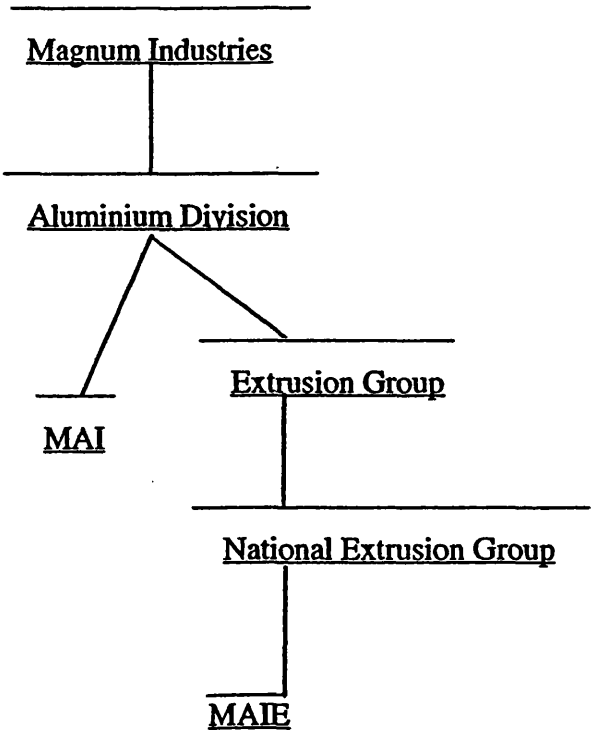
Formal organisational structure before 1988:



Formal organisational structure 1988-1993:



Formal organisational structure from Jan. 1, 1994:



There was strong resistance among MAI and MAIE employees against the establishment of the independent MAIE. The MAI production worker trade union was strongly involved in the matter, and the turmoil at MAI and MAIE became an issue in local media. But in spite of strong internal protests, the new company was established as planned.

MAIE employs about 115 people. Approximately 90 % of the employees are men. What is produced is aluminium profiles which are used in buildings, ship-building, the oil industry, etc. The profiles are produced in standard series or after specific customer specifications, and the bulk of the production is sold abroad. Window frames, staircases, gangways and many other products are made of the profiles by the customer companies. The MAIE production takes place in a large and high-ceilinged hall with adjoining rooms for specific work tasks. The administration is located in a small and fairly new building just across the road from the production hall.

3.3. The production process.

The MAIE production process is organised in functional units which take care of specific parts of the production process. The process involves the following work operations:

When the sales people have settled a new order, production management has to find out whether there exists an extrusion tool that can be used to produce the ordered profiles. Extrusion tools may be likened to household appliances for the decoration of cream cakes:

You put the whipped cream/aluminium bolts into a container, and the resulting cream decorations/profiles vary due to different "mouth pieces" - extrusion tools - which you attach to the container. If the ordered profiles are not produced before at MAIE, a new tool has to be ordered from an outside firm. If the tool exists in the "tool library", it is taken out from the "archives" and elaborately cleaned and

prepared for production by the tool department people. A well-prepared extrusion tool is vital for the quality of the profiles.

Heavy aluminium bolts are used as raw material for the profile production. These are mainly bought at MAI. When the extrusion tool is ready, the tool is fastened to the extrusion press which is a huge machinery in the centre of the production hall. The extrusion process is then set into action and closely monitored at all times. Aluminium bolts are fed into the press, and the applied tool shapes the bolts into the required profile form. After the profiles have cooled down for a while - they are very hot when they come out of the extrusion press - they are transported on conveyor belts to be cut into appropriate lengths. Some profiles are discarded for being of poor quality, and these are sold to MAI for recycling. Other profiles which are slightly out of shape are brought to the MAIE mending work station, where odd profiles are straightened and adapted to fit customer specifications.

When the profiles are found to be satisfactory, most of them are taken to a large oven in order to be tempered - a process that takes many hours. Some profiles then are off to the coating department, where they go through a chemical process involving baths of acids and water to give them a specific surface which may or may not involve colours. Still other profiles are transported to the small MAIE adaptation department where they may be cut into smaller pieces, specific devices be attached to them, etc.

Next, the profiles are transported to the package department where they are manually packed into large cartons or wooden cases and made ready for shipment. Cranes lift the cases onto semi-trailers that are parked inside the production hall or they are being transported to the MAI harbour where they are loaded onto ships.

The MAIE employees are divided into work shift groups which work day shifts or after a two-shift, three-shift or four-shift schedule. The work shifts are permanently organised, each with a shift supervisor as the work leader. There are four extrusion press work shifts (the extrusion press never stops except for designated maintenance periods), three packaging shifts, two coating shifts, one adaptation shift, one

maintenance shift, and one extrusion tool shift. The adaptation department normally works after a day schedule, but will operate a two-shift schedule when this is needed. The maintenance workers also as a rule work day shifts, but in periods of much maintenance need they are expected to work at different hours. They may also be telephoned at home and asked to come in when equipment emergencies occur.

When I first entered the production hall at daytime, what caught my immediate attention was the grey-coloured environment. The walls and ceiling of the hall are predominantly grey, and the aluminium profiles in their different stages of production are also mostly greyish. But although the physical surroundings seemed quite gloomy, what also caught my attention was the orderliness of the place. If I had expected rubbish and mess at an industrial site, I did not find this at MAIE.

What I also quickly noticed was the high level of noise coming from all corners of the hall: Profiles bang into each other, they are sawed, deformed profiles are thrown into containers, and the extrusion press produces much noise. The air is filled with harsh and uncomfortable sounds.

The temperature in the production hall is fairly normal except very close to the extrusion press where it is quite hot. The only fumes and gases to be found are by the acid baths in the coating department where the stench is rather penetrating.

What is very striking is the frequency of transport operations up and down the hall: Trucks are in constant movement, and cranes operating from the hall ceiling go back and forth all the time with their loads of profiles and packed cases. People are also constantly on the move from one place to another in the hall even though regular shift members mostly restrict their movements within their work station "boundaries". Those who go up and down the hall are mostly shift supervisors, managers, the maintenance crew, administrative and sales personell, and also guests such as customers and corporate representatives, etc.

All in all, there is a bustling activity during daytime. In evenings, though, I found the atmosphere of the production hall to become quite transformed. Due to fewer people handling aluminium, the level of noise is considerably lower, and the truck and crane traffic is largely reduced. But what makes the most notable difference is that the "hordes" of busy-looking people walking up and down the hall have disappeared. All this makes the atmosphere of an evening shift (and probably also a night shift although I never took part in one) remarkably more relaxed and "friendly" than during a daytime work period. The people at work seem - and also themselves say - to be more at ease, and this is explained to be the result of the absence of daytime stressors such as the high noise level and lots of different people milling around their work stations. At evening shifts, shift workers are normally occupied with quite straightforward production issues, and they are more able to decide upon their own time schedules and production efforts than during daytime work, it is said.

I found the evenings I spent in the production hall almost cosy, especially when it was dark and cold outside and it was a relief to enter the warm and lighted hall. But this feeling of cosiness was more than anything based in the generally lower work pressures of the evenings and the more relaxed attitude this created among employees. People found time to talk more easily than during daytime shifts, which made evening shifts very valuable seen from my data collection perspective.

3.4. Work hazards.

What kind of injuries have MAIE employees suffered? What are the major work hazards? What work situations do MAIE organisational members fear more than others? In order to understand what MAIE safety is about, it is necessary to look into the risk situation at MAIE as organisational actors perceive this to exist in their daily work life. MAIE organisational members' risk constructs are based in own and fellow workers' work experience and work accidents and in the hazard scenario that is communicated through management information.

3.4.1. Experienced work accidents.

The majority of MAIE workers have personal experiences from work accidents. The accidents vary in seriousness from involving hospitalisation to not needing medical attention at all. One fatal accident has occurred at MAIE.

"My foot was caught under a pile of profiles". "I have been burned when handling hot profiles". "I have injured my fingers when lifting profiles". "Metal particles have been stuck in my eye". "I have had numerous small knife cuts while preparing packing equipment". "I have been scratched and bruised while handling profiles". "Once an extrusion tool fell down and injured my foot". "I slipped on the wet floor and injured my ankle." "I have had a broken ankle from a fall on the semi-trailer when loading profiles." "I suffer from muscle and back pains due to the lifting of heavy profiles." "A splinter from the metal bands that we use for packaging hit my face once." "I have had acid burns".

This reveiew is an exemplification of work accidents that MAIE workers have experienced. Work accidents and injuries have happened in all MAIE departments, and many of them have resulted in cuts, burns, bruises, and broken limbs. The one fatal accident at MAIE took place in the coating department, where an employee fell into an acid bath.

3.4.2. Worst scenarios.

When MAIE organisational members are asked about what accidents they fear most, their answers mainly describe three situations:

- A load of profiles loosens from the transport crane and hits people who work underneath.
- An explosion leads to a fire at the extrusion press.
- Newly extruded profiles "go wild" after having come out of the extrusion press and hit people at high speeds.

All three scenarios are based in actual events: Objects have fallen off crane loads, there has been a fire at the extrusion press, and newly extruded profiles occasionally do "go wild". Fortunately, these events have not caused serious injuries - as of yet, it is emphasised.

3.4.3. Invisible and non-acute work hazards.

In many organisational actors' risk concepts, work situations that lead to non-acute and long-term injuries have a significant place. The most commonly mentioned hazards of this type are the noise level at certain work stations and the manual lifting of heavy profiles which takes place at many work departments.

According to employees, what characterises these hazards is that they are focused less than more acute and easily visible work hazards in MAIE safety efforts. One employee says:

"To be fair I have to say that the noise situation has improved over the years due to new technical solutions. But it still is not satisfactory at some work stations. What is worse, though, is that the need to lift profiles manually still exists, and that hardly any training is given about how to lift while simultaneously protecting your back. As the result of hazardous lifting rarely becomes evident until years later, it is scarcely treated as any problem of MAIE, but rather as belonging to the individual."

Health problems caused by such invisible and non-acute hazards are not included in the MAIE system of accident reporting. This is the case even if employees are absent from work due to what the doctor diagnoses as back and muscle injuries stemming from long-term work hazards.

3.4.4. Work stress and risk.

"In my opinion what causes most work accidents is work stress. When they rush you either by direct orders or by more subtle messages, then what you know about working safely often disappears. Of course they never tell us to break safety

routines - rather to the contrary they might say that sticking to safety is especially important in times of rush. But people react differently to stress. Some keep their calm, while others get frustrated and lose their alertness", one employee says.

He is representative for MAIE workers when pointing to the potential for accidents in stressful work situations. A large majority of organisational members point to work stress as a main precursor for accidents and injuries.

"If there is a breakdown of the extrusion press and it stops, then the level of stress becomes high. Every minute the press is out of order, money is lost, and the maintenance crew is put under a lot of pressure to make repairs as quickly as they can. Fortunately, they are experienced guys, and up till now they have managed to work safely in spite of the rush", one employee says.

He is supplemented by a maintenance worker who tells that it might be impossible to pay attention to all safety regulations when a production crisis has to be coped with:

"But to compensate for this, I will argue that we work with a generally raised alertness in such situations. Consequently, I do not think we have had work accidents due to work stress in our department", he says.

A high level of work stress is frequently connected to customers' orders that have to be finished within certain time limits. Employees talk angrily about the sales department promising delivery without having a clue about production issues, and they either praise or criticise their shift supervisors for the ways they handle this pressure on behalf of the shift group:

"It is the responsibility of the shift supervisor to calm things down when the work situation is becoming stressed. And some of them do. But others do not - they are so focused on fulfilling managerial production expectations that they do nothing to decrease work stress among shift members. To the contrary, they may create work

stress by their wish to compete with other work shifts for good production results", it is stated by one employee.

Many employees talk about how they slow things down in periods of work stress disregarding shift supervisory efforts to do so or not:

"When I find it necessary to calm things due to safety considerations, I do this. But this is easier for me than it is for younger workers, as I think they are more afraid to be looked upon as lazy or too cautious. I do not care about this", one experienced worker says.

It is argued by employees that the gradual reduction in the number of employees at some work stations have caused increased work stress. Fewer hands to cope with growing production demands has contributed to a generally more stressful work environment in spite of improved work equipment, it is said.

Also, new MAIE employees who point to what they perceive as non-satisfactory work and safety training claim that their lack of work competence functioned as a stressor during their first period at MAIE.

It is stated by MAIE employees that the perceived connection between work stress and work accidents rarely is documented in accident reports. They claim that what normally is written down as the reason for accidents is what directly led to the accident – for example that the employee in question was unattentive and performed an unsafe act. Thus, work stress with its perceived hazardous potential for accidents rarely comes to organisational recognition, it is argued by MAIE employees.

3.4.5. Work monotony as work hazard.

"You do the same work operations over and over again, and the feeling of monotony and boredom may contribute to a general carelessness which can lead to work accidents. The most common result of this situation is what we call "trade

mark" injuries: Smaller burns, cuts and bruises happen all the time, and they are often not reported as work accidents. What I fear more, though, is that more serious work accidents will take place due to the monotony of the work process", one employee says.

Many of the MAIE work operations are monotonous and offer employees few changes in work tasks. MAIE management recognizes this situation as a problem that may influence both general job satisfaction and work safety, and efforts have been done to implement a system of job rotation at some work shifts. Whether positive safety consequences can be inferred from this reorganisation is unclear, but it is a shared belief of managers and many employees alike that variation in work tasks will have a positive impact on the number of work accidents, especially the smaller ones.

3.5. Being a fieldworker.

3.5.1. Fieldwork period 1 (January - May 1994).

After initial contact with the safety staff at MAI and MAIE management, I was given access to MAIE for a limited period of time as I was allowed to be present at the site from the beginning of January 1994 till the end of May the same year. I spent two or three days a week at the plant during this period, and I mostly followed the schedule of daytime work, which mean I was present at the plant from 7.30 am till 3.30 pm. All MAIE employees were informed beforehand of my coming and the intention of my work, and they were asked to cooperate with me in my research efforts.

The safety manager was appointed as my main contact at the plant. Our relations were positive from the first moment, and he was always helpful and interested in my work. Gradually he involved me in many of his reflections about MAIE safety work, and he became an important informant as my work proceeded. The production manager, too, was interested in my work, and he often spent time to

share his views of safety issues with me, even though his work days were very busy.

At the start of this first period, I went through a "get-to-know-the-plant" schedule which took me to every corner of MAIE and introduced me to all aspects of the production process and most of the MAIE employees. After this initial period which lasted for about two weeks, I concentrated on getting to know the employees of the plant, both production workers, shift supervisors and managers: I spent time with production workers in their coffee and lunch breaks, I sometimes gave a helping hand in the production process at some work stations, and I walked around the plant and tried to initiate or take part in conversations when it felt natural and possible.

On reflection, I can see that an important part of my role construction as a fieldworker was my personal history: I am born in and I presently live in the local area where a majority of MAIE employees live, and I also speak the local dialect. Inhabitants of this region traditionally have looked upon themselves as sharing a unique identity encompassing cultural traits such as a marked dialect, entrepreneurship, hard work, strong religious interests, rather rough and direct norms of human communication, a strong solidarity in times of crises, etc. Although being an outward-looking region for centuries due to seamanship and widespread emigration and thus being much influenced by foreign cultures, the region is still in a way a rather "closed" place in which most foreigners - domestic or from abroad - seldom are looked upon as truly "genuine" inhabitants even if they might have spent a considerable amount of years in the region.

It is important to establish people's family connections when you meet someone you do not know in order to place them correctly on the area's social map. I had not lived in the region for twenty-five years previous to my fieldwork, but that was not essential as I have local family ties and can easily be placed in the local "Who-is-who" calendar. From day one it became known throughout the plant who I was (meaning primarily who were my father and my brothers and my uncle and my male cousins), and it was very common when I was introduced to someone that our

conversation started by employees confirming their knowledge of one or more of my relatives. I, in turn, tried to establish their family background, and I was always happy when I could say that I knew some member of their families.

This establishment of local relations was the common ground of communication between MAIE employees and me in the first phase of my fieldwork. It felt natural and intuitively right for me to engage in this "activity", and it was not something I did in a calculating way to obtain good relations with my informants. Rather, it was an area in which we all could communicate as fellow human beings, and it produced natural conversations which served to ease the social akwardness I felt present both in myself as well as among the MAIE employees at the outset of my fieldwork. The fact that I gradually became socially established as "being OK" in spite of my strange interests in safety and my academic background I mainly account to my local area background and that I acknowledged the local norms for an interest in people's family backgrounds. I was "one of them" and was thus able to gain most employees' positive support in my data collection work. (My being "one of them" became almost touchingly clear to me when an acquaintance of mine met a production worker out of the work setting, and my presence at MAIE was discussed. "She is OK," the MAIE employee said. "She seems to have an interest in talking to us about lots of things. I never had expected that.")

So after a while I was able to feel more relaxed about my research at MAIE, but the feeling of unease never left me completely. It became accentuated every time my position as an academic was being mentioned and I discovered how little knowledge most of my informants had about college life and how much prestige and "mystery" this life was surrounded with in their imaginations. At such instances, the social distance between us immediately returned.
Bartunek and Louis (1996) discuss a role position that I find similar to what I experienced at MAIE. They distinguish between organisational members who are fully insiders and people who are not so, but nevertheless can be termed "relative insiders" due to their prior knowledge of and connections to the organisation and its surroundings in some way. Even if this position of being a relative insider does not give insider access to organisational interpretations and organisational affairs, it is a

position which may enable a person to comprehend more easily what is going on in the organisation.

I was a relative insider at MAIE by way of knowing the local culture and its codes of conduct, but I was also a relative outsider as I had removed myself through education and occupational status from my roots. But this being a little bit of each seemed to give me favourable access to the MAIE social networks and to safety constructs that were not readily communicated frontstage. Hopefully my being a relative outsider has balanced my position as a relative insider in that it has kept my insider biases in check due to the mental distance that an outsider position creates.

A feeling of social awkwardness will probably always be a part of ethnographic fieldwork unless one "goes native" - which is not a condition to aspire for. "Continued involvement in the field can be likened to be constantly on stage", says Punch (1986:17), and I tend to agree with him. The feeling of being an actor who all the time is tense about her performance never left me while doing fieldwork.

An essential reliability check on ethnographic data is continuously to consider the influence of one's role enactment as fieldworker on the research process. Becker (quoted in Taylor and Bogdan 1984) argues that a fieldworker cannot avoid taking sides in the fieldwork situation, disregarding all conscious efforts not to do so. This situation will inevitably influence one's data collection work, and awareness of own biases and preferences is the only possible answer in order to prevent the research process from losing its credibility, according to Becker. Mouly and Sankaran (1995) echo this concern by pointing to the possibility of fieldworker preferences for some actors' arguments and the danger of being dragged into internal organisational conflicts.

An awareness of own actions and social ties is thus necessary in order to help the ethnographer to control her personal preferences and to evaluate whether the data material has been acquired under circumstances that were too strongly dominated by her personal likes and dislikes. In my work, this awareness has led to never-ending considerations whether the "being one of us"-feeling trapped me into

becoming a less critical and less reflective fieldworker than I otherwise would have been. This is a question never to be answered in a "scientific" way. Primarily, though, I consider my inclusion into the "local tribe" to have been beneficial for my data collection. And in spite of my close relations to many organisational actors I felt I was able to keep a critical distance to the information they gave me. I look upon the mere awareness of these problems to have worked as a constant check on my data collection process.

Due to my physical location (I was given a small office in the production hall), the way I dressed (I always wore the standard production work outfit), my habit of spending the lunch hour with production employees (which I was advised to do by MAIE managers) and also probably due to my being a "local tribe member", I became more integrated in the production workers' doings and dealings than I did in management's. I never achieved the same access to the full scope of managerial safety considerations as I did among production employees. I was told by managers at some occasions that I probably knew more about employees' safety constructs than they did themselves. I do not know whether they said this because they found the thought uncomfortable or not. Whatever the reason, I felt occasionally I was kept at an arm's length by some managers.

I might have been able to achieve better psychological access to all managers if I had not been so strongly "adopted" by groups of employees, and this is the main reason I can see for being critical to my establishment of a local identity which led to this integration process. But I think that another issue also contributed to what I occasionally experienced as a tense attitude towards me by some of the managers: As I have previously argued, it was essential to me that my research should reflect the multiplicity - and not only the official managerial versions - of safety realities at my fieldwork site. I wanted to give ordinary production workers just as prominent a place in my fieldwork efforts and my analyses as anyone else at the plant, and this approach might have been found somewhat surprising and odd in managerial circles. I explained these intentions of mine when I talked about my fieldwork with organisational members, and I tend to believe that this multiplicity emphasis might have gained me favourable "scores" within the employee group while it might have

created some questions regarding my credibility among members of the management group.

Due to the unexpectedness of my multiplicity focus, I can understand that my approach may have been interpreted by management members as less "neutral" than what they preferred it to be. I debated quite a bit with myself whether or not to present my approach as clearly as I in fact did, but there seemed to be no way to "avoid" openness about this central principle of my research process. I cannot see how I could have "hidden" my strong interest in multiple safety definitions - even if this interest of mine might have barred me from more backstage management information than I was able to get.

In this first phase of my fieldwork, I utilised a wide approach in my data collection. Although safety related issues were my main interest, it was necessary for me also to collect data concerning many other organisational topics, as I saw it essential to investigate MAIE safety as an integrated part of the total organisational situation. I was fully aware that this open and indiscriminate "surrender" to the complexity of my fieldwork site probably would give me a lot of data that were not directly relevant for my safety study. On the other side, it was impossible for me at this stage of my work to have any clear-cut and valid opinion about which data were relevant for the study of MAIE safety and which were not. The relevance question had to be addressed at a later stage.

It was not always easy to stick to my conviction that a wide range of data and multiple safety definitions were necessary in order to grasp the safety situation at MAIE. Sometimes organisational members openly wondered why I was interested in issues which they considered to be far removed from safety considerations, and I got the feeling that I occasionally was being looked upon as prying into issues that really were none of my business. I could legitimately investigate into the "compartment" of safety, but my intentions became more questionable when I also showed an interest for "non-safety" issues. Members of MAIE management were among those who were sceptical to my wide approach.

In hindsight, I will argue that what essentially caused some strain in my managerial relations during my first fieldwork period was a difference in opinion about how a researcher role ought to be enacted. Their approach to research and researchers was based in a "scientific" traditon in which research deals with numbers, drafts, questionnaires, etc. - research activities that are structured, effectively implemented, and show visible and quick results. My research role was constructed around ideas that had very little in common with anticipated researcher behaviour, and this asymmetry between management role expectations and my actual role performance brought confusion and also some scepticism into our relations. I experienced a daily strive in the balance between a fulfillment of what was expected of me in order to "prove" I was a genuine researcher and thus to secure my continued access and the observation of my own standards of research methodology and approach. I had to compromise my ideals many times during my fieldwork, especially in the first phase before my role was more firmly settled.

In March 1994, after having learned to know the plant site and many of its people and also tried my hands in the production process, I started interviewing at MAIE and also at the "mother plant" of MAI. I interviewed the managers at MAIE (general plant manager, production manager, financial manager, and safety and quality manager), one shift supervisor, the MAIE trade union leader, and five shift safety representatives. I also interviewed the general plant manager and the human resources manager of MAI, one of the MAI safety staff members, and the trade union chief safety official for the whole plant area including MAIE. As my intention was to be filled in with safety perceptions and interpretations from actors' points of view, these interviews had no pre-planned schedule except for being focussed around safety. I took extensive notes during the interviews and wrote them out at length immediately afterwards. None of these interviews were tape-recorded.

The decision to start planned interviews and the choice of interviewees was the result of decisions on my part as I experienced signs of unease in the MAIE management group due to the way I chose to carry out my fieldwork. I was subtly told that I was expected to interwiev managers and other key safety actors, and it

was also hinted that my informal mixing with production employees was a little more extensive than what had been expected. Apparently, MAIE management was most satisfied when I used my office when doing "research", so in order to calm down what I perceived as management anxiety and to enter into a more "proper" and recognised researcher role, I completed my first interviewing round a little ahead of my own preferred time schedule.

During this first fieldwork period, I was present at several meetings and other formal events where safety matters were on the agenda. I attended a plant "Family Day", seven safety inspections, one management meeting, two shift safety meetings, one shift quarterly meeting, some of the monthly meetings between management and trade union officials, and a day conference for shift safety representatives, managers, and union officials. I took notes during the meetings, and I was given the formal minutes for the meetings when such were made.

Shift safety inspections and shift safety meetings frequently take place on a short notice, and they might also be rescheduled due to unforeseen productional demands. Thus, it was a difficult task for me to keep track of these events, and I was unable to participate in all safety inspections and safety meetings even though I was always welcomed to do so.

In the way of written documents, I was given or collected myself several of these: The MAIE and the MAI Health, Safety and Environment Manuals, information sheets from management and the trade union, minutes from shift safety inspections and management inspection rounds, newspaper clippings, managerial policy documents, etc.

I wrote a field diary covering every day of my fieldwork. In the diary, I have outlined events and experiences of my MAIE days: my findings and concerns, the main points of numerous informal talks with organisational members, my observations, my thoughts about my data material and theoretical assumptions, etc.

As agreed upon when I was given access to the plant, I wrote a report summing up my impressions of the MAIE safety situation after having finished my first fieldwork period. I sent the report to MAIE management and had a meeting with them in which I was given feedback on what I had written. It was pointed to some factual errors in my description of MAIE and its activities, and some managers wondered about the way I had let multiple perspectives come forward in my report. I was advised to be aware that the conflicts concerning the recent MAIE establishment still would influence many employees' evaluations of the organisational situation.

After the meeting, I edited my report in order to correct the errors and also to emphasise that what was said in it was not a description of "the" safety situation of MAIE, but rather what I had interpreted as the safety situation seen from different organisational actors' points of view. What I learned during this communication about my report was that I had to be careful in my writing in order not to cause potentially harmful speculations about individuals' and groups' safety perceptions. I became faced with the dilemma of what data to include in a written report (Punch 1986; Whyte and Whyte 1984).

The revised edition of my fieldwork report was submitted to the MAIE trade union chief official, and I never received any specific comments about it from the union. (My tiny office in the production hall was next door to the trade union office, but this physical nearness did not result in me being given any intimate access to the trade union's doings, although I had acceptable relations with the trade union officials all the time. At different occasions, though, I noticed that management representatives imagined me to have closer relations with the trade union than I actually had.)

3.5.2. Fieldwork period 2 (March - May 1995).

After the submission of my field report, I formally asked MAIE management for permission to continue my fieldwork at the plant. It took months before this permission finally was granted me, and based on information that I acquired during

the last part of my fieldwork, I have reasons to believe that MAIE management primarily wanted to refuse my request. The said reason for this was a worry about my work being too time-consuming for both MAIE managers and production workers. But due to the support I was given by organisational actors in both MAIE and MAI, I was finally given permission to come back and finish my field research. It was agreed that I would have access until the end of 1995.

I threw myself into fieldwork as soon as the formal permission was granted, and I spent my second fieldwork period to reestablish myself at the fieldwork site and to find out if new safety issues had emerged during my absence. From now on, I also found it less socially awkward to be a fieldworker. I was more able to define my daily schedule now as it was less important for me to please everyone due to the promise I had obtained for fieldwork completion at MAIE. Also, it felt good to be warmly welcomed by the great bulk of employees who said they had been waiting for me to come back and were glad to see me. Due to this predominantly positive reunion, I had no trouble to renegotiate my continued informal access in the production life of MAIE. And as time passed and I became more relaxed about the relations between management members and myself, I noticed that the tension I had previously experienced began to diminish. I was very decently treated, and whether I previously had focussed too much on what I perceived to be strenous relations or whether a change occurred is difficult to say, but whatever the reason, I found it easier to communicate with management members during the last parts of my fieldwork than in the beginning.

I continued to attend meetings and safety inspections also in this fieldwork period, and I had 10 interviews with interviewees that I had talked with previously. Six of these interviews were tape-recorded. I also wrote my daily field diary. Otherwise, I participated in informal events and work occasions after my own discretion as I "lurked" around the work site. I was much helped by shift supervisors who repeatedly pointed out to me interesting events and who constantly filled me in with relevant safety information and other issues of organisational importance. In both practical and mental ways, I prepared myself to my main fieldwork period which would commence in August 1995.

3.5.3. Fieldwork period 3 (August - December 1995).

It had been my intention from the outset of the research process to collect data at disperse time periods instead of doing data collection in one long period only. I chose this approach of separate fieldwork periods in order to be able to catch the dynamics of and possible changes in the safety situation better than if I concentrated upon one long fieldwork period. I would have preferred my second fieldwork period to have been of longer duration, but due to my formal access situation, it was impossible to get started again before March 1995.

During my work process, I discovered a benefit of doing fieldwork at intervals which I had not considered beforehand: It turned out to be advantageous for me to get out of the fieldwork setting and become physically and mentally removed from it and thus acquire a distance to both the social and intellectual immersion of being a fieldworker. My breaks from the field gave me an opportunity to reflect upon my data material and my analytical efforts in a way that provided clarification in the continuation of my research. Physically removed from MAIE and engaged in other activities, I felt I was better able to regard my data material and my fieldwork efforts in a more critical light than I was while I was there in my role as a relative insider (Bartunek and Louis 1996). New angles and themes appeared as I pondered about MAIE and safety - which I felt I was constantly doing in both systematic and unsystematic efforts over the two-year span of my fieldwork periods.

The most strongly felt disadvantage of going in and out of the organisation was the need to reestablish myself socially over again twice. My position as a relative insider seemed to have been weakened, and although I was fortunate enough to be welcomed back by most employees and rather quickly became absorbed into the daily life of the plant anew, it was a personally strenous situation once again to be the "event of the day" and to answer numerous questions concerning my present research plans. Also, I was told about safety related events that had taken place while I had been absent that I very much would have liked to have been an observer of, and I thus occasionally experienced a feeling of having lost continuity due to my

periods of absence. But all in all, I consider the advantages of my periodic attendance at MAIE by far to outweigh the disadvantages of the approach.

From August until December 1995, I spent approximately four days (or evenings) a week at MAIE. Again I participated in shift safety inspections, shift safety meetings, meetings between management and trade union officials, I wrote my field diary, and I studied written safety information and other available plant information. I also took part in the informal life at different shifts when this was possible and felt natural, and especially during evening shifts, such informal settings became crucial for my data collection. My research efforts in this fieldwork period, however, were less wide and all-embracing than previously. This was a result of my acquired knowledge of MAIE which made it possible for me to focus in on the more specific safety issues without the fear of isolating safety in an organisational compartment of its own.

My main data collection strategy during this last fieldwork period, though, was the interviewing of production employees. After having finished my first periods of fieldwork, I had focussed upon certain perceptions and concepts regarding the MAIE safety perceptions, and I had tried to be aware of similarities, disagreements and nuances in different actors' constructs. I felt I had managed to catch the "skeleton" of the multiplicity of safety perceptions, but I needed both confirmation, correction and supplementary knowledge to establish as complete a picture as possible of the MAIE safety world. Even though I had observed, listened to and talked to a large amount of MAIE employees, I was also aware that I had spent considerable more time with some employees and shift groups than with others, and I worried that the perceptions of these "key informants" had been given too significant a place in my data material so far. So I set out on my grand "triangulation" work: In order to check up on my own perceptions so far and to supplement them, I wanted to interview all production workers separately - provided they were willing to talk to me.

I asked all production workers that were working at MAIE at the time - 95 persons including the shift supervisors – if I could interview them, and all except one were

positive to my request. Two persons later cancelled their appointments with me. I thus interviewed 92 production employees. The interviews took from 30 minutes to two hours, with the majority of them lasting for about one hour. I let the interviewees decide whether to use a tape-recorder or not, and approximately two thirds of the interviews are tape-recorded. When tape-recording was not wanted, I took notes which I wrote out immediately after the interview was finished.

The interviews were semi-structured in the way that I did not meet my interviewees with a preset list of questions, but I had a set of themes concerning safety which I wanted to be touched upon during the interviews. I had developed this "themes list" during my first fieldwork periods when I "collected" safety issues and safety perceptions, and I wanted to get these further commented upon and illuminated. Included on my list were issues regarding dangerous work situations, safety training, safety bureaucracy and rituals, shift relations and safety, safety management, shift supervisors and safety, safety success factors, the history of MAI/MAIE safety, safety in the new organisation, safety and work stress, etc. Sometimes it was quite unnecessary for me to bring specific issues into the interview, as the employees on their own initiative covered a wide range of safety themes. At other occasions, I needed my list either to get the interview going or to have employees respond to specific issues. Very few of the interviews are comparable in form as they never followed any specific structure except for my initial words when I told my interviewees about my research project and assured them of the confidentiality of the interview situation.

The most crucial reason for my implementation of a "full-scale" interviewing round instead of selecting interviewees based upon representational criteria was that I wanted more data to confirm the multitude of safety realities and safety constructs that I at this stage of my work anticipated. Also, if I was wrong in my assumption of a multiplicity of safety perspectives at MAIE, then this extensive interviewing would reveal my mistake. Either way, a complete interviewing round would fulfill my research commitment of paying attention to all voices - also the normally silent ones - of the MAIE safety community.

I carried out this comprehensive interviewing plan well within the time limits of my last fieldwork period. Initially, I was surprised that I never - except once - got a refusal when I asked for an interview, but after a while I discovered that the willingness to come to my office to talk about safety partially was founded in some degree of prestige and that the interviews were much talked about in the work environment. Most production employees rarely attended meetings or had other appointments during work hours, and it seemed that they welcomed both the interview situation and the break from their daily chores that the interviewing event offered them. I was often asked by members of work shifts when their shift was due for interviews, so even if I had wanted to finish the interviewing without including all shifts, I would have felt this to be difficult because of the expectations that employees seemed to have of becoming directly involved in my research project. It would have been very awkward for me to explain why they were not to participate in my work.

I tried to be aware of not asking for employees' time when it was inconvenient for the production process, and I worked closely with the shift supervisors to plan my interviewing in a way that did not interfere too much with the work routines. This planning process was very time-consuming. I had to locate people, find out whether or not I could disturb them in their job tasks, and ask them for an interview at a later occasion. When it became clear that they were willing to be interviewed, we had to find a suitable time for the event. After having been through this procedure, it was seldom necessary to reschedule our appointments, but if this occasionally was the case, I was always told beforehand. Not infrequently, it happened that shift supervisors offered to fill in for shift members so they could keep their interview appointments with me.

At the end of my fieldwork, I was told by management representatives that their worries about my taking too much of employees' and managers' time for my research had proved unfounded. I had not caused any disturbances in the work process, and if they had known this beforehand, they would not have been sceptical when I asked to continue my fieldwork, they said.

3.6. Analytical work.

In my fieldwork periods, I concentrated upon data collection and the writing of comprehensive notes about the fieldwork situation. I wrote out all interviews that I was not permitted to tape-record, and I also transcribed a considerable number of the taped interviews. Paralleling this work, I wrote numerous "reports" to myself in which I discussed safety themes that emerged from my data and how I was to pursue the themes in my further research.

I experienced the frequently referred to cyclic pattern of ethnographic research (Spradley 1980; quoted in Mouly and Sankaran 1995; Wadel 1991) with its reoccurring and not easily distinguishable phases to be both productive and anxiety producing. It was productive in the way it challenged me to be open and flexible regarding my research design and what would be the next turn of the road in both the data collection work and my theoretical deliberations. I had given myself the vow from the outset of my fieldwork that I would pay the utmost attention to the safety definitions that were being presented to me by organisational members and that my own categories and concepts which originated in theoretical studies were not to take prominence over what I found in the field. The cyclic approach of ethnography helped to reassure me that this "grounded" way of conducting research was legitimate and not only a way I preferred to work due to an inability of mine to discover overarching organisational patterns and structures concerning the MAIE safety situation. My chosen approach continuously challenged me not to be satisfied with either the amount of data I had collected or the preliminary theoretical assumptions I made, and I was constantly pushed further on in data collection and analytical endeavours in seemingly never-ending interactions between the many different phases of the research process. I had a quite literal feeling of going back and forth all the time during my fieldwork periods: One moment I was in the empirical world and concentrated on data collection, and the next moment I was back in my theoretical world where I worked with my data and tried to reveal their secrets so I could go on collecting more data with new knowledge about the MAIE safety situation. Back and forth - back and forth - this is how my fieldwork periods in retrospect appear to me when I think about them now. I feel confident that this

ethnographic "dance" (Wadel 1991) which I performed - although at times rather clumsy and hesitating - has been my main means for achieving the research results I have come up with.

But to do cyclic research is also anxiety creating - at least it worked that way for me. The continuous movements between data collection and theoretical considerations provided me with an everlasting feeling of frustration of never being finished with anything. At times when I thought I was on to something important, I had to revise my opinion after the next back and forth movements, and I felt that I was doing very little progress in my research. I started to envy colleagues of mine who were doing research based in specific theories and whose objective it was to confirm or disconfirm a set of theoretical arguments in an empirical context, and I seriously wished I had embarked upon similar projects, as I was almost ashamed of my open and flexible approach which I at times felt got me nowhere. During periods of my fieldwork, I was so bothered by this uncertainty of mine that I only hesitantly talked about my work to colleagues. I was so very different, and this uniqueness of mine made me vulnerable as I perceived an unspoken puzzlement in my surroundings whether what I was doing was "real" research.

So the ethnographic cyclic approach and my vow not to build my work around pre-conceived safety categories were not easy research principles to follow. In fear of coming up with far-fetched results which were built upon meagre data and which might be promoted by my desire to see "results" of my work, I at times fell into the opposite ditch of not daring to formulate theoretical assumptions based in my data at all because I was uncertain whether "all" elements and angles were properly covered. I experienced a strenous indecisiveness which prompted me to turn every stone before I was able to draw conclusions. Occasionally, this situation led to great frustrations as I became very anxious about whether I utilised my fieldwork situation to a maximum effect. I had to work hard with myself to be able to live with my constant doubts and at the same time be comfortable with both the amount and quality of my data material and the preliminary theoretical suggestions I gradually dared to come up with.

This internal "fight" between a feeling of not having gained enough insight to come up with conclusions and my wish to come up with theoretical suggestions concerning the MAIE safety situation has been the most strenous part of my research process, and I consider the dilemmas I have felt all through the work process mainly to be a result of my chosen research perspective. To cope with this emotional strain for a research period of several years has not been a pleasant part of this work. Rather, it has been the issue that has mostly pestered me and made me feel utterly miserable at times. I was never able to solve these dilemmas - they probably are unsolvable - and it varied from one day to another whether I found a balance in my work or whether I fell down into a ditch and consequently ruined the fragile equilibrium of my research approach. I can still feel the tension while I am writing these words, and I guess I will continue to experience it as long as I work with my research project.

My main efforts of transcription, categorisation and analysis took place after I had finished my fieldwork. I have written out or transcribed 65 interviews: all the management interviews and randomly chosen production employee interviews – although I made sure that all shifts are represented in the fully transcribed interviews. I have categorised the interviews according to safety categories that emerged during my research process, and I have also categorised my field notes within the same system. In the latter part of this categorisation work, I discovered that I very rarely came across new approaches and angles concerning the MAIE safety situation. This fact combined with time pressures and the abundance of data I already had included in my categorisation system made me decide upon not to go through with an accurate transcription of the rest of my interviews. Accordingly, these are not transcribed, but I have listened to them in order to find supplementary information and descriptions which can broaden my analytical basis.

I will briefly exemplify my categorisation approach by coming up with a couple of examples which show the approach's demand for systematic and time-consuming efforts. (I do miss a mentioning of this non-glamourous part of organisational research in many research reports, and I find such omission unsound since it may give the impression that the analytical process is based upon abstract and even

mystical considerations which are variously grounded in the concrete data material that exists.)

One of the safety constructs that I met fairly frequently in my data material was organisational actors' perceptions about who had the primary responsibility for MAIE safety. Another issue that often surfaced was organisational actors' evaluation of specific safety routines, for example shift safety inspections. After having transcribed my data material, I went "hunting" for data in which organisational members gave their views concerning safety responsibility and shift safety inspections. Finally I brought together all data elements that I considered to belong to the relevant categories - shift safety inspections and primary safety responsibility respectively - and thus ended up with "sets" containing all data I had acquired regarding the mentioned issues. In following this procedure for 40 safety related categories, I developed a thematic safety picture of MAIE in which I had included the different safety perceptions that were presented to me by organisational members. My next step was then to work with these safety themes and try to find issues of specific analytical relevance which could help develop a deeper understanding of the MAIE safety situation. After this, I grouped several of the safety themes together to analyse them in combination.

During this systematic analytical endeavour, some themes became more prominent than others, and some turned out to be of less importance for my understanding of the MAIE multiple safety reality. I discovered that issues which I in the first phases of my fieldwork had a notion about being of vital importance turned out to be of limited significance safety-wise, and also that issues of which I had no early knowledge were highly relevant for my analysis of MAIE safety. Such discoveries of mine are no great novelties in the field of organisational qualitative research, but to me they were confirmations that I was right about my methodological choice and analytical approach. I shudder to think of what would have been my research "results" if I had entered MAIE with preset categories with which to analyse the MAIE safety situation and had stuck to these as the basis of my research.

SECTION C

CHAPTER 4

SAFETY HISTORY AND ITS IMPLICATIONS FOR TODAY'S ORGANISATION

4.1. Introduction.

Accounts of the MAIE safety history and the road to the present safety situation are commonly heard among MAIE organisational actors:

"If you were here twenty years ago, you would not recognise the place. Nobody cared much about safety then, and there was filth all over."

"We had a general manager who really is the one to praise for the improved safety situation".

"When I started here more than 20 years ago, nobody mentioned safety and safety training. We did not know what safety meant. We just started to work."

"What you see at MAIE today is the result of a long and continuous work process for the improvement of safety".

The purpose of this chapter is to focus upon organisational members' historical safety perceptions in order to show how they form a part of present MAIE safety constructs and the present organisational identity. I will analyse perceptions of MAIE safety history as they are presented by organisational members with no evaluation of their historical "correctness" – if ever there does exist such a "correctness". As a consequence of organisational members' focus upon their safety history and development, I will also discuss the question of organisational

self-perception and identity based in organisational members' interpretations of safety and safety success.

4.2. "Then" -

A considerable proportion of MAIE organisational members have worked at the plant for many years and are thus able to give personal accounts of what it was like to be a MAI/MAIE employee during the first years of plant existence. The overwhelming majority of them describe their first years at the plant in similar words as does this pioneer employee:

"You know, many of us came directly from the boat, and we were used to a hazardous work environment in which we were supposed to fix things as they surfaced. And we were not given any formal work training here, so when we started to work at MAI/MAIE, the skills we employed were the same ones as were valued on board the fishing vessel. We were daring and took risks, and our "cowboy" spirit was valued by our managers. No one talked much about safety in those days. There was not room for that in the struggle to get the plant going."

The lack of work training and its potential consequences for the safety of the work place is commented upon by employees when they think back to their first days at MAIE. One worker tells how he was told by his shift supervisor that he was to work as a truck driver:

"He pointed to a truck and told me that I was to drive it. I had never driven a car in my life, but he said it was rather uncomplicated, and then he pointed out the truck mechanisms for me. Well, there I was, all of sudden being a truck driver. It was nothing but good fortune that I didn't have a serious accident."

Crane operators tell similar stories about starting their work without knowing much about their work tasks. But such a situation was considered quite normal then, they say, and they did not reflect much upon the potential unsafety of it at the time. They were aware that they worked at a plant where dangerous situations inevitably

would occur, and they believed that their own skills and good fortune hopefully would save them from becoming severely injured.

Due to the inherent dangers of the MAI/MAIE production process, it is said to have been a generally accepted part of plant life - although regrettable - that work accidents took place and people became injured. And unfortunate incidents did happen, causing injury and suffering: people were burnt by floating aluminium, trucks hit people, employees fell down when working at high levels, and many suffered severe health damages in the polluted indoor work environment.

The image of MAI/MAIE as a hazardous and drab place of work could also be found in the world outside the plant. One of the present managers is the owner of children's drawings of the plant site which were made some 20 years ago. MAI/MAIE is here depicted as a gloomy and ugly place, and the buildings are surrounded with black smoke while some people stretch their heads out of the windows and cough. The children artists had never been at the plant, but their father was employed there, and they presented an image that had been conveyed to them through common descriptions, according to the manager.

Dangerous jobs might also have their more positive side effects: "Back in the old days, I know that housewives bragged about their husbands having especially dangerous jobs at MAIE. They considered this to be status promoting," the same manager says.

But in spite of inherent dangers and rather drab work conditions, employees recall that they were happy to work at MAIE:

"What was the big difference for me was that now, I had a secure job to go to every day, and I got paid regularly. It was a good place to work, and we were proud of being employed at the new plant. We did not think much about getting injured, and of course, we tried our best not to have a work accident even then."

Whenever I asked MAIE employees about their views of the present safety situation at the plant, it was quite common to get an answer which in some way compared today's situation with "then". The previous safety situation seems to employ a central place in organisational members' cognitive schema as a background tapestry and a measuring stick against which the present-day safety situation is being evaluated in terms of improvement and success. As such, the MAIE safety history is alive in many MAIE employees' present safety perceptions.

4.3. - and "now".

If MAIE organisational actors have differing views about many issues, there is one thing, though, they agree about: The present MAIE safety situation is totally different from "then". Through the years, great improvements have taken place in the way that worker safety is being handled according to employees and managers alike. As a result of this, it is stated that the number of injuries - serious and less serious - have drastically decreased through the years.

"Today, safety considerations are central issues of our daily work. We think safety, we talk safety, and our managers constantly remind us about it. We know now that work accidents do not happen randomly, but that they are caused by unsafe situations and acts", one employee says.

This worker is echoed by the majority of MAIE employees, both pioneer workers and younger ones. It can thus be stated that there exists a set of shared perceptions at MAIE regarding the present safety situation and its positive development from a previous poorer state.

Another result of improved safety conditions over time is the knowledge that the only limits for further safety development is human effort:

"When they first started to talk about safety issues, many of us said that it was impossible to improve safety here. I mean, the production was so complicated and if we were to work safer, then we would halt the production process too much. And

besides, much of the equipment we used to work with was unsafe whichever way you worked. But it has been proved over the years that it is possible both to improve our work equipment and to work safer without working slower. So don't you tell me that further improvements cannot be made. That is not true", one experienced worker says.

Seen from organisational actors' points of view, then, shared safety perceptions built upon MAIE safety history have been developed over the years. This framework - a seemingly shared cognitive schema - have the following characteristics:

- The MAIE safety awareness has greatly improved over the years.
- A significant decrease in human injuries is the result of this increased safety awareness.
- Accidents do not happen, they are caused by human actions.
- Since they are caused by human actions, accidents can also be prevented by human actions.
- It is possible further to improve the MAIE safety situation by increased efforts.

It can thus be argued that MAIE general and collective safety constructs have been transformed from being fatalistic and passive categories of safety determinism to becoming the managable and active categories of present-day safety work. A common belief in the possibilities of constantly improved safety is a key characteristic of MAIE safety culture today and forms the basis for all MAIE safety efforts.

4.4. What triggered the safety changes?

If there is a limited set of perceptions to be found in the descriptions of the "then" and "now" safety situations among MAIE organisational actors, a more diversified picture is painted when reasons for the safety improvements are discussed. Employees and managers point to an array of factors they consider to have been instrumental in this transformation process.

The role of the so-called "safety evangelists" is very frequently mentioned as a major safety improving trigger. Members of the MAI safety staff are often named in this group of key persons along with some managers and trade union officials. That the safety proponent role not always was an easy one is exemplified by one of the "evangelists":

"When we started to talk about the prevention of accidents and insisted upon the wearing of personal protective equipment, regulations for truck driving, and registration of all injuries - not to talk about near-injuries - we were considered more or less mad. Employees laughed, shook their heads in disbelief and said we were extremely unrealistic and even a bit soft. You had to expect accidents in a work environment like this, and if you could not live with that, then you ought to find yourself another place of work, we were told. It has been a long and persistent battle to convince employees that we ourselves are the masters of our accidents, and not some unknown force."

A former plant manager is frequently referred to as the one who made safety "take off". He had people clean up the plant outdoor and indoor environment - to people's astonishment he ordered the construction of green lawns and flower beds -, and he insisted upon safety improvements in the production process. To ensure that safety issues were implemented, he paid unannounced visits to the work sites - even at night you could not be sure he would not emerge, it is said. One MAI safety staff member recollects:

"One day I was summoned to his office. There I was scolded for not having spent enough money on safety improvements during the last months."

The role of corporate management in safety development is often commented upon by organisational actors:

"Corporate management put pressure on local management for safety improvements. Without this pressure, I doubt if MAIE safety conditions would have been as they are today. I think our managers today are evaluated also by way

of safety results, and I am sure this has been vital for their safety efforts. Corporate management very early picked up the emerging national trend of improved safety, and this has been our good luck."

Technical improvement of work equipment and machinery is given a significant place when MAIE organisational members reflect on bettered work safety. Many dangerous work operations have been partly eliminated and in all purchases of new machinery and in the planning of new work processes, safety considerations are supposed to be taken into account. This routine is mentioned by many organisational members as having been a vital safety promoting instrument.

Gradually, a formal structure of safety routines including safety inspections, accident reporting, safety meetings, improved housekeeping, safety work procedures, etc. has been developed at MAIE. A bureaucratic system (Weber 1947) of safety improvement efforts is today the result of this development work, and MAIE can be said to have developed a safety strategy in which rules compliance is a major means of safety thinking and action (Gherardi and Nicolini 2000). In this respect, MAIE is in line with numerous other companies and the bulk of the normative safety literature (e.g. Krause 1994; Wilpert and Qvale (eds.) 1993; Tungland 1992). Managers and employees alike evaluate the continuous implementation of their routinised safety structure to have been of essential importance for the permanent improvement of MAIE safety. Without such a system, safety efforts would easily have been casual and short-lived, it is said.

Improved work training and specific safety training – which is compulsory for all new employees – are frequently mentioned reasons of safety improvement. Many employees also point to improved safety training for shift supervisors as a safety improving factor. The use of personal protective equipment has similarly prevented injuries from occurring, it is said. And the many visual safety reminders ("Think safety!"-posters, injury wall boards, etc.) along with other written safety information has worked to keep up a constant safety awareness, it is argued.

Employees also mention certain shift supervisors who are given credit for their efforts to reinforce safe behaviour and thus are said to have been imperative in creating and maintaining employee safety awareness:

"It is annoying that they comment when you do a mistake but never seem to notice when you work according to all safety procedures and regulations. Good supervisors now and then tell people that they appreciate their competent and safe work. That is a great incentive for further safety commitment", one employee says.

4.5. Safety bureaucratisation and decrease of job autonomy?

"Don't get me wrong, but there were valuable things in the old "pre-safety" organisation also ... The job was in a way freer and more dependent upon my own skills and judgement then. All the safety rules and regulations now do not leave me many choices, and at times I feel that all the correct procedures prevent me from job performance based on my own skills."

An experienced worker utters these words, thus suggesting that MAIE safety history also has its less bright sides in organisational members' perceptions. According to him, there was a time when independent problem solving and individual work skills were in more demand at MAIE than is the case today.

Other pioneer workers echo this worker's regret of days gone. They miss what they remember as a situation with less managerial interference in their daily work tasks. Whenever this is commented upon, though, it is at the same time emphasised that the safety bureaucratisation has been vital for the improvement of worker safety:

"I know it has been necessary to construct rules for everything. But I fear that some work satisfaction has been lost along the way to better safety. All the routines and reporting and documentation stuff is at times a killer for work motivation. I don't know if this could have been handled differently," one employee says.

MAIE employees are not the only ones to wonder - and worry – about the bureaucratisation of safety. Also safety researchers are occupied with the loss of flexibility and work autonomy that may be a result of a stringent safety bureaucracy (Singleton and Hovden (eds.) 1988; Kjellén and Baneryd 1983). They point to people's general needs to feel they are in charge of their daily work situation as vital also for safety motivation. The loss of work flexibility in a rigid safety regime may also influence daily work efficiency, it is stated. This argument is echoed by Turner (1992a) who states that a positive safety culture must avoid overly rigid attitudes to safety. Leidner's (1993) general argument that when workers are allowed some discretion to define their work situation, their interest will increase and potential discontent will be mitigated is also relevant for safety work considerations. And Gherardi et al. (1998b:211) state that bureaucratisation of safety prevent people from developing strategies to deal with context-specific problems. Such a safety structure is thus counter-intuitive in its problem solving efforts, it is argued.

I have shown that ambiguity is found among pioneer workers when an evaluation of MAIE safety development is undertaken. They value the safety improvements, and they simultaneously value and do not value the means that have been utilised to reach better safety. But such expressions of ambiguity are not commonly heard when the history of MAIE safety development is being discussed on the organisational frontstage (Goffman 1959). In backstage settings, though, organisational members both discuss the ambiguities and explain that because such constructs do not fit into the shared cognitive schema of MAIE safety development, they cannot easily be discussed openly.

4.6.The self-perception as a safety conscious organisation: History and present accomplishments.

When organisational members talk about MAIE safety in general, they frequently talk about what they consider to be the MAIE safety success history. But interpretations of what has taken place in order to reach a good safety situation include more than mere explanations of the past: The constructs simultaneously

contain an evaluation of today's safety situation and of what is being perceived as important ways of promoting continuous safety improvement. Thus, historical accounts are helpful in sharing light on present-day safety beliefs and safety self-perceptions.

When safety improvements are considered, MAIE organisational members unanimously emphasise that the safety transformation process has happened gradually, and that it still is under way. Organisational consensus thus seems to exist for improved safety to be a processual and not a static phenomena. Another consensual explanation is found in the perception that a formal structure is instrumental in order to ensure that this never-ending process is not neglected. The necessity of a structured and perpetual safety development process can thus be said to be a shared MAIE safety construct.

Otherwise, organisational members come up with a variety of different and in their view non-competing explanations when commenting upon the history of the safety transformation process, and the multitude of explanations criss-cross all group borders and organisational levels. These multiple historical safety constructs can be categorised as belonging to a diversity of organisational spheres including managerial behaviour, technical improvements, communication processes, organisational structure, motivation work, etc. From this multifaceted reconstruction of MAIE safety history can be inferred another seemingly universal characteristic of the MAIE safety culture: The perception that worker safety is dependent upon a mixture of approaches within different spheres of organisational life.

As I have shown, organisational members' constructs of MAIE safety history depict a process of significant safety improvement. This shared MAIE self-perception of being a safety conscious organisation seems to have several consequences for continued MAIE safety improvement:

"You know, it is impossible to feature as number one in safety and openly neglect safety issues. The way we look upon ourselves as a safety conscious company of

the first order results in a special responsibility for MAIE to be safety innovative. If this is forgotten, then we can use the big safety words to remind our managers about this", one employee says.

Supported by many similar comments, it can thus be suggested that the shared self-perception of being a highly safety conscious plant maintains the organisational safety focus and promotes further safety innovation – and even higher safety self-esteem. The well-known phrase that "success breeds success" can be used to characterise an interplay between the high safety self-perception and further safety improvements.

But this generally positive safety situation also calls for reflection concerning future safety work. MAIE's self-perception of safety success can be seen as breeding something else than continued success:

"It was much easier to see results of our safety work in earlier days. Then it was very visible that new safety procedures resulted in safety improvements. Today as we have reached a high level of safety, it takes much more effort to make visible improvements. I don't know – maybe we ought to find new approaches in our safety work. It has been okay, but now I feel we need something new. When you do the same things over and over, you get tired of them and you will lose your motivation in the long run – especially if you don't see much improvement any longer", one organisational member reflects.

Other organisational members have similar reflections, and among younger employees who have been employed in other companies before coming to MAIE, perceptions of MAIE as having a rather historically based and non-innovative approach to safety work are found:

"They are too concerned with the ways they always have done things. It is tiring to hear about this all the time. They ought to learn from others about new ideas to refresh MAIE safety work. There are plenty of examples to find", one new employee says.

"We think we are good, and that is right. But I am scared that our high safety self-perception might dominate our perceptions so much that we do not see – or do not want to see – that there are areas in which our safety work could be improved. Over-confidence is nothing but ruining for our safety efforts in the long run. It can prevent us from being critical to our own actions. Sometimes I think we are too occupied with what we have achieved. I try to be aware of this, but it is not easy", a manager notes.

Thus, claims of a potentially ruining complacency can be heard among organisational members. It is similarly argued that the organisational self-perception of safety competence may work as barriers for new safety learning.

"Everybody here thinks they know all the answers already. OK, but there are also other perspectives. But they do not want to hear so much about them", a fairly new MAIE employee says.

"You know, we are so perfect. We always talk about how well we have done, and critical questions are not welcome. I think we look too much to the past. MAIE is so content with the safety state of affairs that little is done to integrate new views and ideas", an experienced employee states.

Based in thoughts like these, the question can be raised whether MAIE has become trapped in its own self-perception of safety competence and success and whether dysfunctions of success (Miller 1990; quoted in Colville et al. 1999) have become elements of the MAIE safety reality. If the success frame of reference functions as a hindrance for critical questions and the opening up for new safety perspectives, then the long-term costs of a preoccupation with the "glorious past" in combination with the present-day high level of safety self-esteem may be rather negative for the development of the MAIE safety culture.

4.7. A distinguished safety organisation.

But in spite of some awareness of possible negative effects of a high safety self-esteem, what most distinctly characterises MAIE is that most organisational members share a construct that MAIE has been successfully transformed from being in a disreputable "then" situation safety-wise to today's generally praised "now" state of safety affairs. This self-perception of being a successful safety organisation is voiced by organisational members over and over again:

"Safety is our first priority. The most important issue for us is that all workers leave the gates every day without injuries, and we never compromise when safety is concerned. You just have to look at our safety statistics to see that we have succeeded in becoming a safety conscious company. There is no doubt that we take worker safety seriously, and even though we still experience unfortunate events, our safety work is successful. But we must never stop looking for safety improvements, though", a MAIE manager says.

"We are very safety conscious here at MAIE, much more than they are at other plants. We are reminded of the importance of safety at all occasions, and managers, shift supervisors, shift safety representatives and work colleagues keep a constant eye on our work behaviour safety-wise. From what I hear about other work places, our safety work is much better than what goes on elsewhere. You can also easily see this difference when hired firms come in here to do a job. We very seldom experience severe injuries as can easily be the case in an industry like this. It is good to work at a place where safety really is taken seriously", one employee says.

"It is the way we always think about safety, whatever job operations we are involved in. It is in our blood in a way. And it exists because wherever you turn at MAIE, you hear about safety", another employee states.

The organisational self-perception of safety competence is supported by outsider views of the MAIE safety work as well: As is mentioned in chapter 3, MAI – which then included MAIE – was in 1993 presented with a national award for its

safety approach, and in 1995, MAIE won a regional safety award and was also named HSE champion of the year within Magnum Industries' Extrusion Group.

MAIE organisational members are proud of the way they perceive their work place to emphasise safety issues. They also express pride in the widely shared construct that MAIE is a more safety conscious plant than most other organisations, and they appreciate that the outside world acknowledges this perceived safety excellence. The self-perception of being a first-class safety organisation is very often communicated by an overwhelming majority of organisational members. When they talk about MAIE in general terms, its perceived safety competence is very frequently on the agenda.

4.8. The organisational centrality of the frontstage safety identity.

According to Czarniawska (1997), organisational identity may be looked upon as the temporary "end result" of a continuous organisational process of self-perception that includes self-respect, efficiency, autonomy and flexibility. The concept of identity can thus be said to be a more complex and a more stable phenomena than self-perception, and it can be suggested to grasp the "soul" of individuals and organisation.

Self-respect, efficiency and autonomy are central elements in the MAIE self-perception of being a distinguished safety organisation. Due to the previously mentioned frequency with which such perceptions – and other perceptions of safety success – come to the surface and due to the emphasis of significance I have shown is placed on them, MAIE organisational members can be argued to be the owners of a shared safety identity.

Pettigrew (1979) argues that ideally, organisational identity will impart meaning, motivate and resolve organisational concerns. According to this, a shared MAIE safety identity will impart meaning regarding MAIE safety efforts. Such shared meaning constructs have been shown to exist in MAIE safety perceptions and consequently in the organisational safety identity. Based in the shared identity of

being a leading safety organisation, MAIE organisational members becomes motivated to continue their successful safety work. And when disagreements concerning safety issues develop – as in the case of an over-emphasis on the history of success – the shared MAIE safety identity keeps the dissension away from public places in order to maintain the organisational safety unity.

The concepts of frontstage and backstage arenas (Goffman 1959) will be extensively utilised in my analysis of MAIE as a safety organisation. When following Goffman's analytical framework, it can be argued that the safety identity which is discussed here can be termed the MAIE frontstage identity as this shared identity is acted out in open and public places to the benefit of both organisational members and an outside audience.

But due to the regular appearances among MAIE employees of safety self-perceptions that differ from those of safety success and prominence, it can also be suggested that backstage safety identities exist as well as the shared frontstage one. These safety identities are situated in different communities of practice (Gherardi and Nicolini 2000b) – they are situationally produced (Marcus 1992). They are differentiated and complex in their attitudes to MAIE safety, and they may be looked upon as subcultural identities (Brooks 1997). What characterises the backstage identities is the way they supplement or oppose the shared identity concept that is acted out in public. In their "proper" surroundings, these identities are performed just as legitimately as the frontstage one is acted out in frontstage surroundings. And as MAIE frontstage and backstages normally are separate arenas with not much overlapping between them (Goffman 1959), the frontstage shared safety identity can continue to dominate MAIE rhetorics and espoused theories in spite of the existence of backstage safety identities. It is taken to the forefront (Leidner 1993) as a construct that is shared by organisational members.

There exists no other organisational area within MAIE that is referred to with similar frequency and with similar tones of self-respect, self-enhancement and self-efficiacy (Czarniawska 1997; Erez and Earley 1993, quoted in Weick 1995) as is the issue of safety. To the contrary, the routines and chores of daily work are often

commented upon by organisational members in rather derogatory terms. Even though production issues at times are brought to positive attention, the possibilities of creating and maintaining pride and identity around the repetitive and somewhat unchallenging tasks of the production process seem to be rather limited. Safety matters have a positive verbal predominance at the MAIE frontstage, and organisational pride seems to be reserved for safety related issues. It is the frequent flagging in multiple formal as well as informal situations of a safety identity which is built upon safety success that sets the MAIE frontstage organisation apart from other organisations, both seen from an internal and an external point of view.

4.9. The frontstage safety identity as a unifying organisational force.

Porac et al. (1989) connect an organisation's notions of identity to its competitive strategies. MAIE's frontstage identity of safety success can be found in operation also when it comes to production issues: At MAIE, it is common that competitive strength is measured in a comparison of safety key figures with those of other companies. It is also frequently argued that successful safety work with its emphasis on quality and high work competence is a main competitive component which is cost-effective in the long run. Safety is thus connected to MAIE's competitive strategies in a way that enhances the bond between safety and organisational activity in general.

Based in the discussed organisational centrality of the MAIE frontstage safety identity – how it imparts meaning, motivates and resolves organisational concerns (Pettigrew 1979) – and in how frontstage safety issues hold an important position in MAIE production and competitive concerns, it can be argued that the frontstage safety identity constitutes basic building bricks in MAIE's organisational identity in general. Thus, the shared MAIE frontstage safety identity can be seen to function as a unifying organisational force.

It can also be suggested that the MAIE frontstage preoccupation with safety issues constitutes an important MAIE organisational schema (Harris 1996; Isabella 1990;

Stubbart and Ramaprasad 1990) – a schema by which organisational members categorise and interpret organisational events.

Thus, the collectively promoted MAIE frontstage safety identity produces a framework of unity and consensus that seems to be vital for organisational activity in general. It can be argued that safety takes on the role as a unifying and binding force in the sustainment of an integrated organisation.

4.10. Safety history and its implications for today's organisation: a summary.

MAIE safety history has a prominent place in a majority of organisational members' present-day safety perceptions. It is common to evaluate today's safety situation in contrast to what was experienced in previous years, and with the past as a measuring stick, perceptions of the present safety situation become overwhelmingly positive.

Through an interpretation of the safety development process, a seemingly shared collective framework of understanding has developed concerning MAIE safety. Included in this framework is the perception that accidents are not the result of some kind of fate, but are caused by human acts and can be prevented by human effort. The belief that increased efforts will further improve the MAIE safety situation is also prominent.

When MAIE organisational members venture to explain what has caused the safety transformation, their interpretations are more diverse. What is generally agreed upon, though, is that a multitude of organisational factors have been at work. What is also a shared perception is that the safety development has been a gradual, systematic and continuous process. But also ambiguity can be found in reflections over MAIE safety history: Several employees – backstage – point to a loss of job autonomy due to safety bureaucratisation.

MAIE organisational members' self-perception of their organisation promotes a picture of a high present-day safety consciousness which is based in past safety

successes as a significant connection between "then" and "now" can be found in numerous perceptions of MAIE safety. Thus it can be argued that what has happened safety-wise in the past has a direct bearing on today's MAIE safety situation. These shared constructs of success and safety competence seem to be motivators for further safety improvements. Warnings are voiced, though, about the potential of a strong and continuous emphasis on safety history and success to produce over-confidence and complacency and thus prevent more innovative safety approaches.

But in spite of this, the self-perception of being a highly distinguished safety organisation is dominant among MAIE organisational members. They are proud of the way they perceive MAIE to emphasise safety issues, and they are also proud that the outside world considers MAIE to be a safety success history. When MAIE organisational members talk about their place of work in general terms, the perceived safety competence is frequently an issue that is commented upon.

Based in this, it is argued that there exists a shared frontstage MAIE safety identity which imparts meaning, motivates and resolves safety concerns. Backstage safety identities are also found to exist, but even so, the MAIE frontstage safety identity is shown to have a very central and prominent place in MAIE organisational life in general. Because of its organisational dominance, it is suggested that this frontstage safety identity constitutes a basic brick in MAIE's general organisational identity, and thus functions as a unifying and binding organisational force, also outside the realm of safety affairs.

CHAPTER 5

THE FORMAL STRUCTURE OF SAFETY WORK

5.1. Introduction.

As I have shown in Chapter 4, a key perception of the MAIE safety culture is that the gradually developed MAIE formal safety system has been and is essential for the improvement of MAIE safety. This formal organising of safety work is very visible at present-day MAIE, and its espoused purpose is to monitor and continuously improve MAIE safety work. Most MAIE safety activities are included in this structure which is outlined in the MAIE safety manual.

In this chapter, I will focus upon the specific parts of the MAIE formal safety system in order to analyse the system elements as they are perceived by organisational members. Some of the system elements are based in legal requirements, and some are initiated on local initiatives. I will not distinguish between system parts due to their origin as my intention is to concentrate upon the role the elements are perceived to play in today's safety situation at MAIE. I will conclude the chapter with a discussion of the formal safety structure and organisational meaning construction.

5.2. Shift safety representatives.

5.2.1. The set-up.

At each work shift, one shift member is elected to the position of shift safety representative. When elected, the representatives attend a safety representatives' training course of 40 hours' duration. Their rights and duties include participating in shift safety inspections, to be informed and inform about safety issues, and to take part in the reporting of accidents and injuries in cooperation with shift supervisors. They are also expected to keep an open eye on daily safety at their work shifts and to take safety initiatives.

5.2.2. Shift safety representatives' role enactment.

"The shift safety representatives are key actors in our safety organisation. Together with the shift supervisors, they have an essential role in the daily safety work. Whether a shift safety representative is active or not means a lot in the building of shift safety awareness", a MAIE manager says.

Two shift safety representatives talk about their role enactments:

"I really did not care much about becoming a shift safety representative, but since nobody else wanted the position, I was more or less told by the others that it had to be me. And it is okay since there is not much to say about safety at our shift. We are so few, and safety is taken care of by the shift supervisor and the other shift members on their own, so my job does not amount to much."

"I have been a shift safety representative for many years, and when I recently joined this shift, I was asked to become a shift safety representative once again. It is necessary to keep a constant eye on safety, and I try to observe what is going on at the different work stations of our shift group. Quite often I discuss safety issues with the shift supervisor, and I consider it my duty to make sure that promised improvements are implemented. I think it is important that shift safety representatives take their job seriously, and I try to do my best."

These different ways of role enactment are affirmed by MAIE organisational members when they comment upon shift safety representatives: Some are eager and active, and some are much less visible in their role enactment. Within the last category, some are too much influenced by shift supervisors and do not take any initiatives that may be interpreted as even the slightest criticism of the supervisors, it is said.

In order to improve their role enactment, several shift safety representatives maintain that they miss an arena where shift safety representatives can meet regularly to discuss issues of common concern. Up till now, MAIE management

has not made it a priority to establish a shift safety representative group, and it is believed by those who would like to see such a group that this is due to the costs attached to taking shift safety representatives out of their work for meetings.

5.2.3. Differing views on shift safety representatives' role enactment.

Whether MAIE employees prefer the active or more passive shift safety representative role enactment is a question that is ambiguously answered by many employees. On one side, nearly everyone agrees that an active role interpretation is vital for shift safety improvement, and thus, people on the shop floor seem to share the managerially promoted belief that shift safety representatives have a key position in safety improvement work. On the other side, there are quite a few employees who simultaneously argue that shift safety representatives ought not to be too active:

"It is not the job of the shift safety representative to baby-sit shift safety. I don't think he should overplay his role and interfere with how we do our job. I don't want him to pester us with safety "advice"", one employee says.

A wish for both an active and a less active shift safety representative can thus be found within one and the same person's cognitive schema. Ambiguity is also expressed when employees evaluate the perceived importance of shift safety representatives' role enactment:

"To me, it doesn't seem like shift safety representatives are of much importance really for MAIE safety. OK, they participate in safety inspections and some other formal events, but that's about it. If they were not there, I don't think it would matter much", one employee says.

In dialogues with MAIE employees in which such statements appeared, I several times asked whether it would be an idea to get rid of the shift safety representative function altogether since it seemingly did not serve any practical purpose. The answer to this question of mine was always very similar to this employee's reaction:

"Oh no, of course we need shift safety representatives. They constitute an essential part of our safety system, although it is difficult exactly to say how. I think that just by being there, they contribute to the continuous focussing of safety which is a key issue in our safety work."

As an answer to my somewhat provocatively perceived question, some employees turned to MAIE history to support their argument of the importance of the shift safety representative function. The story of Tim, one of the pioneer shift safety representatives, was told in order to illustrate how an active shift safety representative can make a difference and focus safety through his actions:

Many years ago, the plant general manager brought some guests to show them the MAIE production process. As they entered his work station, Tim noticed that the group did not wear the required protective shoes, and he told them they had to leave immediately due to their inadequate gear. Tim's colleagues held their breath, but the general manager and his guests left without saying much. A couple of days later Tim received a letter from the manager in which he praised Tim for his safety alertness and thanked him for being a good shift safety representative.

"Tim was highly respected after this incident, both among managers and employees. This shows how important it is to have shift safety representatives who are alert and courageous, and although most of their duties are rather mundane, you never know when their initiatives will be needed", one of the story-tellers says.

5.2.4. Shift safety representatives: a summary.

In safety regulations and organisational rhetorics, shift safety representatives have a prominent place as a vital element of MAIE safety efforts, and in daily work life, it can be seen that the prescribed functions of shift safety representatives are implemented according to regulations. Even so, shift safety representatives ask for increased cooperation within their group to promote a more active and creative role enactment, but so far this wish has not been attended to.

Whether shift safety representatives play the essential role of MAIE safety as is proclaimed in organisational rhetorics is differently evaluated by MAIE organisational members. Whether shift safety representatives themselves want to play an active role in safety improvement work is also an issue of differing opinions. And whether employees want them to interfere in daily work tasks or not is a question of disagreement and ambiguity among MAIE workers. What there is consensus about, though, is the perception that the shift safety representative function is as vital as ever, even if it may be difficult to point to specific safety achievements because of shift safety representative efforts nowadays. But as a means of safety focussing and a symbol of safety tradition and awareness, safety shift representatives seem to possess a significant place in organisational actors' safety perception.

5.3. Shift safety inspections.

5.3.1. The set-up.

Shift safety inspections are scheduled to take place monthly at all MAIE work shifts, and usually, they are carried out according to plan. Inspection participants are the shift supervisor, the shift safety representative, and at times also the production manager. The purpose of the inspections is to monitor shift safety and to bring new safety issues onto the shift safety agenda.

5.3.2. How shift safety inspections are carried out.

The sight of shift safety inspection participants who walk around the work station, stopping to watch a work operation or to study machinery or other objects is well-known to shift members. As the "inspectors" watch, ask and discuss, specific issues are written down on the inspection list for later attention.

What can be seen when observing shift safety inspections is the different ways that inspections are carried out. At some shifts, the shift supervisor is the one who is the dominant member of the group, while at others, the shift safety representative acts

as an informal leader who takes initiatives and is the group secretary. And at some shifts, the inspection group members spend considerable time talking to shift members about safety issues, while at other shifts the shift safety inspection may take place with hardly any communication with shift members at all.

What also differs is the way shift safety inspections are handled before and after the actual inspection: At some shifts, inspection group members meet beforehand to plan the inspection and to summarise what has been done - or has not been done – about issues brought forward in the last shift safety inspection. At other shifts, the inspection begins without such a session. And as will be discussed later, the regularity of shift safety meetings to follow inspections also varies among shifts.

5.3.3. Shift safety inspections as means of safety improvement.

The typical shift safey inspection list comes up with 3 to 10 work issues which are to be further considered safety-wise. In shift safety inspection no. 4/94 at one shift, the following issues are noted: Water on the floor to be removed, a car is wrongly parked in front of one of the outside doors, a new shelf is needed, aluminium rubbish by a wall is to be removed, and more storing place for work equipment is needed. The inspection list for shift safety inspection no. 3/94 at another shift shows these issues: Damaged lamp and faulty tap must be repaired, dirt under extrusion tool equipment to be removed, containers for disused aluminium need a fixed place, inconvenient lamps to be removed, fire extinction equipment by door lacks required control sheet, small fault with crane mechanism, and loose and damaged floor grate in outdoor area. What can be found on both lists is the name of the person who is responsible for handling each issue and the time period within which it is to be fixed.

These two lists feature characteristic examples of the type of issues normally focussed at inspections. Broadly, it can be said that the majority of issues can be put into two categories: work equipment issues and housekeeping issues.

"Regular shift safety inspections are invaluable instruments for our safety improvement work. It is through the inspections that we become aware of the majority of the MAIE safety problems, and it is based in these findings that we seek new safety solutions. Safety inspection lists set the agenda in our safety work, and by participation in the inspections, employees strongly influence what safety is all about," one MAIE manager says.

The large majority of MAIE employees agree with this managerial statement. Through the years, many safety issues have been resolved as a result of being focussed during shift safety inspections, it is said. Based on this perception, most employees believe that when a problem is put on the inspection list, chances are good that a solution will be found - or at least it will be explained why it is difficult to solve the problem immediately due to economic or technical reasons. Since shift safety inspection lists are supposed to be checked over and over until the noted problems are resolved, employees consider inspection lists as essential tools for safety improvement.

Although MAIE organisational actors may differ in their evaluation of the immediate results of shift safety inspections, there is full consensus about the importance of the inspections as an institution. It is emphasised by managers and employees alike that they make a difference for MAIE safety by their mere existence. The regularity of safety shift inspections is an important means to keep safety issues constantly focussed, it is argued.

5.3.4. Some employee reflections about shift safety inspections: questions in spite of consensus.

Along with the commonly shared positive perception of shift safety inspections, ambiguity can also be found. Some employees point to what they perceive as a paradox when they compare shift safety inspections with the daily work situation: It is argued that inspection participants often encounter the same situations they write down in their inspection reports without taking much notice of them when being out of the inspection framework. It is asked whether issues are "saved" for

the formal inspection since there is believed to exist an informal requirement for a minimum of issues to be noted down during inspections.

What is of concern for quite a few employees is what they perceive as an increasing inspection focus on housekeeping:

"I don't know - it seems that shift safety inspections mostly have become rather banal housekeeping inspections. Although good housekeeping is important for safety, you don't need safety inspections to clean your house. Rather, I think that more specific safety issues ought to be more numerous on inspection lists than is the case now. I find it rather pathetic when a large portion of the listed "problems" have to do with water on the floor and displaced profiles. Mop the floor and remove the profiles, and save the shift safety inspection for more substantial issues!", one employee argues.

His reflection is echoed by a significant number of employees, and when discussing this, a couple of possible reasons for the housekeeping focus are mentioned: Is it the result of a safety situation in which most safety issues are resolved or is it the result of a reluctance to raise the "real" safety issues? Different answers point to different perceptions of the MAIE safety reality.

Some employees argue that due to the way some shift safety inspections are carried out, inspection group members' safety perspectives only come to the forefront. Safety issues based in ordinary employees' perceptions of their work situation are not focussed, and those being responsible for this are some shift supervisors who really are not much interested in the inspections, it is argued.

5.3.5. Shift safety inspections: a summary.

MAIE shift safety inspections are carried out as intended, and a general consensus exists among organisational members about their necessity. The inspections are said always to have functioned as key tools of safety improvement, and their role today is interpreted to be as important as ever, both to resolve specific safety

problems and to keep the MAIE safety focus alive. Shift safety inspection lists are seen as a main instrument for safety problem solving and for the setting of the MAIE safety agenda.

In spite of this consensus, ambiguities and questions about shift safety inspections exist. It is asked whose safety perceptions dominate the inspection lists, and it is seen as a paradox that issues which are focussed during the inspections may be left in peace during the ordinary work day. Most of all, though, it is asked if housekeeping problems have achieved a too dominant place among inspection issues and thus have gained an unduly position in MAIE safety work.

The institution of shift safety inspections seems to be perceived as important both as a direct instrument of safety improvement and as a symbol for the upkeep of good safety traditions, and shift safety inspections hold a significant place in organisational members' positive perception of the MAIE safety culture.

5.4. Shift safety meetings.

5.4.1. The set-up.

After a shift safety inspection, a shift safety meeting is to be arranged. Meeting participants are the shift safety inspection group, the shift members, the safety manager and frequently also the production manager. The purpose of the meeting is to inform about and discuss safety issues that have surfaced during the inspection, and also to discuss the shift and plant safety situation in general.

5.4.2. How shift safety meetings are carried out - or not carried out.

It can be observed that shift safety meetings are arranged with less regularity and with greater difference in form than shift safety inspections.

The press extrusion shifts have regular shift safety meetings with a set agenda: The shift supervisor informs about the "results" of the latest inspection, and the safety

manager informs about reported incidents and key safety figures as well as talking about the plant safety situation in general. Finally, the production manager might talk about production results and new production plans. Also, information of general plant policy issues may be given. Meeting participants are encouraged to come up with questions and comments to the presented issues, and a meal is served during or after the actual meeting.

Other shifts have less regular formal shift safety meetings, but at least once every six months, all shifts hold a general shift meeting where safety issues are on the agenda. In the interval between these meetings, some shifts may have the occasional formal shift safety meeting, while others have more informal meetings which overlap with a coffee break. At some shifts, these informal meetings are often announced right before they take place, and if the work situation requires it, they might be postponed to another day. Management representatives may or may not participate in these irregular and informal shift safety meetings.

"I have asked our shift supervisor why we don't have more "real" shift safety meetings. We have discussed this among shift members, and we agree that we would like to have regular and formal meetings. I don't know why, but he was not enthusiastic about my suggestion. Maybe he thinks it is too much work for him. Or maybe he felt that there was some criticism of him inherent in my question. But at least he promised to consider it", a shift safety representative tells.

5.4.3. Ambiguous perceptions of shift safety meetings.

Most MAIE employees praise shift safety meetings as important means to further improve work safety. They have differing views when considering the meetings in detail, though.

"Shift safety meetings are OK, but I wish they were not as boring as they are. It is always the same - key safety figures, production information, bragging about how good we are in our safety performance. I wish some new issues could appear on the

meeting agenda, and I know that at some MAI departments, they discuss many interesting things," one employee says.

Another comments upon shift safety meetings in this way: "They are important in order to keep the safety focus at MAIE. And I appreciate them because they give us an opportunity to meet with management in a way we never do during the work day."

"Shift safety meetings are boring, and there is not much of a dialogue between us and management at there. They talk and talk, while we just sit there. But what is nice, though, is that the shift is together and we have a nice meal. It is a break in our daily routines and a social event for us. I like to be together with my shift mates like this, it makes me feel as part of something," a third employee says.

"I find it valuable to be informed about MAIE safety and the general organisational situation at shift safety meetings. These regular meetings is a proof of the MAIE safety emphasis," says another employee.

All MAIE managers share a belief in the importance of shift safety meetings: "Shift safety meetings are vital as information and discussion arenas to keep the safety focus and organisational safety learning constantly alive. At shift safety meetings we discuss and evaluate our safety practices in order to become more safety conscious," one manager says. He is echoed by the other MAIE managers in this view.

The fact that shift safety meetings are irregularly arranged at some shifts are rather vaguely commented by managers, and they may say that some shift supervisors have a daily safety dialogue with shift members and thus are in small need of formal meetings. MAIE managers are also aware of the evaluation of shift safety meetings as boring and being dominated by one-way communication, and it is said that it is a managerial wish to introduce new themes at the meetings in order to make them more interesting. As yet, though, nothing much has been done to change the traditional shift safety meeting agenda.

5.4.4. Shift safety meetings: a summary.

In line with organisational rhetorics, shift safety meetings are looked upon by MAIE organisational members as arenas for safety information and safety learning and are thus considered vital for the continuous safety focus that MAIE prides itself to be a proponent of. But employees perceive other functions of shift safety meetings as well: They are looked upon as a chance to meet with managers face to face, and they are considered to be important social and shift identity building events.

Shifts in which the meetings are regularly arranged are considered by work colleagues to have high standards in their safety work as the regularity of the meetings is perceived to evidence systematic attempts to improve safety. Shift safety meetings thus seem to be associated with high safety awareness in MAIE safety perceptions.

Shift safety meetings as an organisational institution is looked upon by the large majority of MAIE organisational members as vital for keeping up and expanding good safety work - in spite of the fact that a significant number of employees having critical remarks about the existing agenda of shift safety meetings. Shift safety meetings holds a prominent place in organisational members' perception of MAIE safety reality, and the meetings seem to be perceived as instrumental as well as a having a social and symbolic function in MAIE safety performance.

5.5. Safety procedures.

5.5.1. The set-up.

At the time of my fieldwork, the MAIE handbook of safety procedures consisted of 42 specific procedures. The procedures include regulations about how to handle chemicals, how to load profiles onto semi-trailers, how to file accident reports, the use of personal protective equipment and rules for many other specific work operations.

5.5.2. Safety procedures - from general praise to practical implementation.

MAIE safety rhetorics emphasises that all safety procedures are to be complied with by all organisational members in all work situations.

Employees praise the safety procedures as a means of accident prevention in their daily work and also as a symbol of MAIE safety awareness. Besides, the procedures are appreciated in their function of establishing limits for what can be expected of workers in the production process. Due to the centrality of safety procedures in organisational rhetorics, it is next to impossible for shift supervisors or managers to request work operations that are in opposition to formal safety procedures even if they wanted to do so, employees say. Very few instances of work requests that are inconsistent with MAIE safety procedures are in fact mentioned by MAIE organisational members.

The positive front stage evaluation of the detailed safety procedures is supplemented by MAIE employees' backstage evaluations:

"In my opinion there are too many safety procedures. It is impossible to recognise all of them, and you get fed up when there are so many. I think too many safety regulations are harmful for our safety motivation in general - soon you cannot cross the floor without having to observe specific safety regulations. But on the other side, there are work situations in which I think there ought to be more detailed safety procedures, so I don't know. This is not easy," one employee says.

Another employee explains: "Everyone knows that if we worked in accordance with all safety rules we would never be able to finish our work within reasonable time limits. It is not as if we consciously break safety procedures, it is more like adapting the procedures to our work situation in order to make things function in daily work life".

"It is too inconvenient to follow every detail in the safety procedures, and I admit that laziness is one of the motives for not doing so. And besides, if we followed

every safety rule, we would work so slowly that there would be no room for breaks," a third employee says.

Such situational safety constructs frequently surface when employees are out of reach of MAIE managers. Employees argue that their shift supervisors and managers agree that interpretation of safety procedures is necessary in daily work life in order to get things done. But it is also said that it is best to avoid referring to situational safety interpretations, since an open discussion probably would force shift supervisors and managers to claim that there is nothing like legitimate situational safety constructs and that MAIE safety procedures are meant to be followed by the letter in all situations.

And even in backstage surroundings, MAIE employees talk about their safety procedure adaptations in rather generic terms without being very specific about their actual "rule violations". It is claimed that common sense and rules of the thumb which have developed during work experience are at the base of a careful adaptation of safety procedures, and that competent workers thus know how to handle these situations.

The limits for situational adaptation of safety procedures and potential difficulties attached to such a practice are also debated:

"When I do not follow the book precisely, I kind of have my own safety procedures, and I do not act hazardously. All my actions are always well within good safety limits. But I know that if something happened while I was taking a safety short-cut, then it would mean trouble for me", one employee says.

MAIE managers say they do not know about adaptations of the MAIE safety procedures in specific work situations. They also argue that if they knew, they would immediately call a stop to such practice. Thus, the acknowledgement of situational safety interpretations as useful tools of work is seemingly not shared by managers and employees.

For an observer of MAIE work situations, it is difficult to point to specific work situations in which it is evident that safety procedures are violated. When safety regulations are adapted to "fit" specific work tasks, this takes place subtly and is not bragged about. It can be suggested that due to this strategy, it is possible to carry on an adaptation of safety procedures without violating the MAIE shared perception of the benefit of detailed safety procedures.

5.5.3. Personal protective equipment - a safety area of individual discretion?

There is one category of adapted safety procedures, though, that is easy to explore into for an observer: The individual utilisation of prescribed personal protective equipment is visible for all.

The wearing of hard hats is mandatory all over the production hall at all times. It is uncommon to see employees without their hard hat on, and if this happens, it is the rule that a colleague, a shift safety representative or a supervisor reminds the employee about this failure to comply with safety procedures. (Shift safety representatives are by some employees called "hard hats representatives" due to their perceived eagerness to notice these safety violations). The constant wearing of hard hats seems to be an accepted and unquestioned norm of the MAIE safety culture, and the same can be said about protective shoes which as a rule are worn all the time by all employees.

Personal protective equipment which is required at specific hall areas and during specific work operations may be glasses, gloves, hearing protective devices, and long shirt sleeves. It is not uncommon to observe that the prescribed use of such equipment is not implemented by both employees and shift supervisors.

"I am aware that I do not use hearing protection even if I am supposed to, but it is so uncomfortable to wear those ear plugs. They make me feel isolated from the rest of the world," one employee says.

"It is a nuisance to keep taking the glasses on and off depending on my work tasks, so I guess I sometimes do not use them as I am required to. Sometimes I forget, and sometimes I am too lazy to take them on," another employee says.

Personal convenience, laziness, forgetfulness and job competence are the explanations which are given for non-compliance to personal protective equipment safety regulations. Some employees also mention negative motivation that originates in shift supervisors' occasional neglect of the proper procedures. What can be observed is that organisational members often are left in peace when they choose not to use personal protective equipment. Although reminders may come from work colleagues and shift supervisors, these reminders seem to be of a different vigour than those regarding hard hats. And not infrequently, the neglect is not commented upon by anyone. Apparently, it is left to individuals' discretion to decide whether it is necessary always to adhere to prescribed safety procedures about personal protective equipment. The norms of the MAIE safety culture seem to provide legitimacy for such personal cost-benefit decisions.

5.5.4. Safety procedures: a summary.

The MAIE safety procedures are praised as important tools to prevent work injuries, and they are presented in organisational rhetorics as absolute instructions which are to be followed under all circumstances.

Backstage, it is discussed among MAIE employees whether there are too many or too few safety procedures. It is argued unanimously that a smooth and effective production would be impossible without an adaptation of safety procedures to the actual work situation. Besides, worker convenience may also be a reason for situational interpretation of the procedures in the specific work context, it is argued. The construct of situational safety is acknowledged as a rational one by employees, and its practical implementations are done subtly without much open talk. Hence, the shared concept of adherence to all safety procedures can exist simultaneously, undisturbed by situational interpretations in daily work life.

The implementation of safety procedures regarding personal protective equipment seems to hold a special position within the MAIE safety culture. Except for hard hats and protective shoes, organisational members to a large degree are allowed to use their own discretion about when to comply to personal protective equipment regulations. It might thus be suggested that situational safety definitions are considered legitimate when it comes to evaluating the benefits of personal protective equipment.

5.6. Safety and work training.

5.6.1. The set-up.

All new employees attend a basic safety course arranged by MAI safety personnel before they start work at MAIE. When the new employees begin their job at their designated work shift, they are given general and specific safety information and receive on-the-spot work and safety training.

Shift supervisors are responsible for arranging the necessary safety and work training in order to enable new employees to become competent shift members. It is delegated to the shift supervisors to organise the training programme, and common procedures for the implementation of training are not followed.

5.6.2. Evaluation of training from the training providers.

MAIE managers argue that training of newcomers in order to make them safe workers is best attained by work training in the specific work situation. According to managers, this training is most competently organised and implemented by those who know the specifics of the shift situation, and managers are in general satisfied with how training is taken care of at shift level. There is nothing to indicate that new employees are involved in more work accidents than other employees, and this shows that MAIE training efforts are successful, managers say.

But still, some doubt comes forward regarding the ability of all shift supervisors to be competent training organisers:

"I don't know - maybe we ought to formalise our training efforts a bit more than we do since I am not sure that all shift supervisors are able to - or even see the importance of - extensive supervision and training for newcomers. I know that there are significant differences in how shift supervisors handle this, and it is unsatisfactory if it is dependent upon shift supervisory attitudes whether the training is good enough or not," one manager says.

At some shifts, the shift supervisor designs a training schedule in which he, the shift safety representative and some workers have designated roles. But it seems to be the most common model of training that the shift supervisor delegates the training to experienced workers who are to work closely with the newcomers for a period of time. Thus, shift colleagues most often act as the de facto trainers of new employees.

"I think the way we train new employees directly on the work spot is a good way of learning. When I am a trainer I show them how to handle their job tasks, I talk about safety issues, and I supervise their work closely in the beginning. And I tell them to ask whenever they are in doubt about something. It differs how long it takes before they are able to work on their own, and some of them do not ask much and seem to me to be rather uninterested. But others quickly become competent workers," one experienced employee says.

Most "old" MAIE employees find the training of newcomers to be well taken care of, and many of them point to improvements from their own training experience - which was next to nothing - to support their views. Some shift supervisors emphasise that newcomers differ in their training needs, and that the informality of the training allows flexibility to take care of such differences. But some employees come forward with supplementary views:

"I don't dislike to train new employees, but I wish there were some guidelines for this. As it is today, I feel that the shift supervisor "dumps" the training responsibilities on us without caring much about what we do. It would have been better if we had discussed and agreed about what is to happen during the training period", one employee says.

Another one says: "I don't think our training is good enough. What I observe is that after the so-called training period, the majority of new employees are not competent to work on their own. In my work capacity, I have to monitor them, and quite often I have to ask them to do things differently. I know they find me a nuisance. I have asked my shift supervisor a couple of times if we could plan the training better in order to cover all work tasks, but he has been less than lukewarm, and nothing has happened. I guess he thinks I stick my nose into something that is none of my business".

5.6.3. Evaluation of training from the training receivers.

"I was quite surprised by the training I was given when I came to MAIE. What happened was that the shift supervisor mentioned some safety regulations, and then I was "handed" to an employee whom I was to be supervised by for a period of time. He was nice enough, but what he mainly did was to tell me to ask him if I was unsure about anything. I have been employed at a MAI department before I came here, and there is a huge gap in the quality of the training I received at MAI compared to this. I have to say that I am shocked - they like to talk about safety excellence, but the work and safety training does not support such a statement," says one of the younger employees.

This employee is echoed by other young employees in an evaluation of the work and safety training for newcomers. Many of them talk about their discomfort of what they perceive as being left more or less on their own from the very beginning as is exemplified by one young employee when he looks back upon his first days and weeks at MAIE:

"I felt totally out of place. I was too shy to ask for help and advice, and consequently, I was slow to learn my job tasks. I know that my shift colleagues thought me lazy since I did not take initiatives, but that was not the case. It had been great if there had been more specific training. I know I would have learned quicker then".

But there are also other voices among MAIE newcomers:

"My training period was quite good. I know I was lucky since I joined a shift in which the shift supervisor takes an active interest in training. The supervisor monitored my training, and he systematically informed me about new issues as I gradually learned more. It is a pity that work and safety training at MAIE is so dependent upon supervisory interest and competence."

The majority of the MAIE newcomers - the receivers of the work and safety training - evaluate the training to be of a lower quality than the training providers do. Thus there can be said to exist differing perceptions at MAIE concerning the design and implementation of the plant work and safety training. These differences of perception are commonly not revealed in open frontstage settings, though, but can be found in sheltered backstage situations.

5.6.4. Handling of heavy profiles: a neglected area of work training.

Manual lifting of heavy profiles takes place at many MAIE work stations, and although mechanical lifting devices are installed at some places to protect worker backs and muscles, these devices cannot fully compensate for the strains caused by the continuous handling of heavy loads of profiles. At some work stations, mechanical lifting devices have not been installed at all.

Some of the MAIE old-timers remember that long ago, a physiotherapist came to MAIE and talked about lifting techniques which prevented back and muscle injuries, and a few workers remember they have seen brochures about this issue. Other workers cannot remember that coping with the hazards of extensive lifting

has been included in their training, and young employees are quite certain they have never been involved in training where proper lifting techniques were on the agenda.

"When you think about our daily work tasks, it is rather awful that such training is not a priority at MAIE. I guess this has to do with the invisibility and long-term perspective of injuries caused by failure to lift properly. And besides, such training would never produce any improvement in the safety statistics since these injuries are not included there, and I think this is a reason why nothing much is done as there are no statistical incentives to improve the situation. It seems we have to take personal responsibility to prevent these injuries - which is not easy in a busy work day," one employee says.

5.6.5. Safety and work training: a summary.

MAIE management and the majority of employees praise on-the-spot training, and they emphasise the informality of this training as vital for the handling of different training objectives and individuals' differing training needs. Still, some would like to see formal procedures and guidelines to ensure the quality of the training. They argue that today, too much is dependent upon shift supervisors' interest and ability to organise a good training situation.

Several of the training receivers - the MAIE newcomers – are negative in their evaluation of the MAIE training efforts. The perceived lack of training structure and its random implementation is frequently commented upon, and it is also mentioned how the informality of the training can be disadvantageous to persons who are shy and socially reserved. New employees who are satisfied with their training point to their good fortune of having a shift supervisor with training interest and capability.

There seems to exist a gap between how the MAIE training efforts are perceived among a majority of training providers and training receivers. Seen from different perspectives, they evaluate the MAIE training processes differently, thus bringing forward multiple interpretations of the MAIE safety and work training system.

No systematic training is provided about how to handle heavy profiles in order to minimise back and muscle injuries. It is generally perceived that the prevention of such damages is a personal responsibility, and this situation is by some suspected to be the result of the non-acuteness of these injuries and their lack of inclusion in statistical safety records.

5.7. Accident and incident reporting.

5.7.1. The set-up.

The purpose of the reporting of accidents and dangerous incidents is to learn from these events in order to prevent accidents in the future. According to MAIE safety procedures, all accidents leading to person and equipment injuries and all dangerous incidents are to be immediately reported to the safety manager. The reporting form asks who was involved, what happened, the type of injury, if personal protective equipment was used, what was the cause of the accident/incident, and suggestions to prevent the same event from happening again. The form is filled in by the shift supervisor and the shift safety representative based on details from the one(s) being involved in the accident or dangerous incident.

The monthly number of MAIE accidents and incidents is communicated to all shifts, including descriptions of the type of injuries and dangerous incidents that have taken place. More detailed information about occurrences is occasionally posted on hall and shift wall boards.

5.7.2. What is reported -

It is commonly heard among MAIE organisational members that the reporting of accidents and incidents is a vital tool of accident prevention. Thus it is in the interest of everyone that all unwanted events are duly reported so that the organisation can learn where safety improvements are needed, it is said.

At many occasions, MAIE managers emphasise the importance of reporting, and they try to encourage employees to report more extensively. Although they are satisfied that the number of reported accidents and incidents have improved over the years, they are still convinced that not all "reportable" events in fact are reported.

In three randomly chosen months during my fieldwork (March 1994/February 1995/October 1995) there were reported zero/zero/zero accidents involving absence from work, one/two/one accidents involving person injuries, four/one/one events involving equipment damage, and zero/three/two dangerous incidents. In the fourteen months from September 1994 until October 1995 the number of MAIE reports were as follows: two reports of accidents involving absence from work, 17 reports of accidents involving person injuries, and 42 reports of dangerous incidents.

Injured ankles account for the accidents involving work absence, and among the person injuries there are reports of acid in face and eye, cut on arm, crushed finger, burn on arm and particles in eyes. Reports involving dangerous incidents include profiles that fell off a semi-trailer, extrusion tools that fell down onto the floor, someone who tripped due to disorderly conditions on the plant floor, a profile that fell down on somebody's wrist, a crane load that was near the body of an employee and newly extruded profiles that took an unexpected course on the conveyor belt.

5.7.3. - and what is not reported.

Not a single person at MAIE will argue that all accidents, injuries and dangerous events are reported. Different explanations why this is not the case exist:

"It is absurd to argue that all types of injuries are to be reported. I mean, almost daily someone gets a cut or a small burn - what we call "trade mark" injuries. There is no sense in reporting these because they will always happen and cannot be prevented at a place like MAIE. So it is a waste of time to report them", one employee says.

"The reporting of incidents takes time, and I must feel sure of the necessity to report before I do so. Smaller incidents are not worth the time and effort of reporting - if you report all these, you would be doing nothing else. For instance, I think it is absurd to report a limited oil leak on the floor. It is much better to remove the oil there and then and being done with it in that way. But they say we ought to report this as a dangerous incident", another employee says.

"I do not like to see my name in reports, so I guess I do not report as much as is wanted by management. Of course, some incidents have to be reported, but in other cases, I try to judge whether it is necessary to report or not. I know I am not the only one who thinks like this even if it is "wrong"," a third employee says.

Employees also point to previous experiences of reporting in which they found the feed-back of their reporting to be far from satisfactory:

"If you take management's words seriously and do report, then it is demotivating for further reporting if there is not much response in way of work process or equipment improvement. When you experience this, you think twice before you report next time", one employee says.

What these quotes evidence is the situational interpretations among MAIE employees about when and what to report and when and what not to report. Different norms for reporting seem to exist all over the plant, and according to many employees, reporting frequency differs between shifts. These differences are explained by shift supervisor and shift safety representative emphasis on the importance of reporting.

5.7.4. Reporting as a source of safety learning.

Official MAIE rhetorics states that the reporting of accidents and dangerous incidents is a main resource for safety learning and improvement, and MAIE managers continually emphasise the safety learning perspective when promoting more extensive reporting. Both managers and employees maintain that over the

years, reports have led to many safety improvements, and this shows the importance of increasing the amount of reports for a further reduction of work accidents, it is said.

In spite of this general agreement, many MAIE organisational members argue that the safety learning which originates from reports leaves much to be desired. The question that is raised is if information and feed-back from accidents and dangerous incidents is given in such a way that it initiates systematic safety learning.

Several MAIE employees argue that not much is done with accident and incident reports except for the filing of them, the transferring of them into statistics and the sporadic production of summaries which are distributed to shifts and/or posted on wall boards. These rather unsystematic ways of handling reported issues are not in line with the intentions of safety learning, it is said.

"I do not know much about accidents and even less about dangerous incidents at MAIE except what takes place at my own shift. You hear rumours, but the information about unwanted events is not good enough. Maybe sometimes I see a report where some incidents are mentioned, but that's it. They can't expect us to read every note on the wall boards, and I don't even know if all information is posted there", one employee says.

MAIE managers acknowledge that they have not as yet found the ultimate way of ensuring that accident and incident information is systematically spread to all organisational members although they claim that the information is easily accessible for all who cares to know. It has been repeatedly debated whether it is an idea to circulate all reports all over the plant, but the problem of involved persons' anonymity has so far prevented this from taking place. But if such a routine can improve safety learning, it ought to be considered in spite of its unpleasant sides, according to many employees and managers alike.

The issue of safety learning based on reports is not only a question of good information routines, however:

"You know what really makes me angry is what often is written down as the reason for an accident or a dangerous incident. Not infrequently it is said that the employee was not careful enough and this is why the accident took place. I am tired of such phrases as the only explanation. I think they ought to find out if there are reasons why employees act unsafely and if it has something to do with work conditions at the shift, stress at work, etc. It is too convenient just to put down employee carelessness and that's it. There isn't much worthwhile to be learned from this", one employee says.

This employee is echoed by several employees who question the limited range of explanations for work accidents and unwanted incidents appearing in reports. A seeming lack of interest in causes which are related to the broader work process prevent a thorough evaluation of the situation in which the accident or dangerous incident took place, it is said. Many employees state that when this is neglected and the cause of accidents are individualised, the potentially useful feed-back from unwanted events will be restricted and organisational safety learning will suffer.

But there are also many MAIE employees who find individuals' unsafe acts to be the correct explanations for the majority of accidents and dangerous incidents:

"I am convinced that most accidents happen because we do not take proper care. We take safety short-cuts due to personal convenience, and it is thus often quite accurate when it is stated that accidents happen due to individual violations of safety regulations. What we can learn from this is to take better care and follow the safety procedures strictly," one employee says.

During my fieldwork, I never heard that MAIE management raised the lack of more complex accident and incident explanations as an issue of concern. As previously noted, their main worry was how to increase the number of reported incidents and how to design information routines in order to spread knowledge about accidents and incidents for the improvement of organisational safety learning.

5.7.5. The meaning of reports: different constructs.

The most obvious meaning of accident and incident reports is the one promoted by official rhetorics which emphasises reports as a vital tool for safety learning and improvement. This interpretation is shared by a majority of MAIE organisational members, and it also forms the background for employees' cited discontent with how reports are written and utilised as means of safety learning.

But another interpretation of the managerial quest for more extensive reporting is brought forward by some employees:

"When you look at how little is done with reported issues, it makes you wonder if the much-talked-about importance of reporting has more than one motive. At shift safety meetings our safety "results" are compared with those of other plants within our corporate group, and if one of the plants has a period with little reporting, this is commented upon. It seems to me that the mere number of reports is important in order to stand forward as a safety conscious plant, and maybe management is asked uncomfortable questions if we have few reported issues", one employee says.

According to this interpretation of the meaning of accident and incident reports, it becomes more understandable if the reports are neither always acted upon nor systematically utilised for organisational safety learning. They serve their function by their mere existence, it is said.

MAIE managers do not share this interpretation of the meaning of safety reporting, and they deny the perceptions of corporate plant competition based on the number of reported issues.

5.7.6. Accident and incident reporting: a summary.

In order to learn from accidents and dangerous work incidents, extensive reporting of these is encouraged by MAIE management. In spite of this and in spite of an improvement of the number of reported issues over the years, it is commonly

acknowledged that only a portion of MAIE "reportable" events actually are reported.

Reasons not to report are said to be a refusal to report "trade mark" injuries, the perceived waste of time when reporting minor events, a dislike to see one's name in reports, and a general discouragement of reporting which is the result of what is perceived as unsatisfactory response to previous reporting. Shift differences of what is "reportable" or not is also said to exist.

Even though organisational members in general agree that reporting is important for organisational safety learning, differing views about accident and incident reports as sources of safety improvement exist. Many employees argue that systematic information about reported incidents are lacking, and managers acknowledge that a satisfying way of dealing with reports as tools for learning is yet to be found. The reported causes of accidents and incidents are also debated by MAIE employees, and several point to what they consider an overrepresentation of individualised explanations for unwanted events and the neglect of potentially more complex causes. Organisational safety learning suffers from this narrow perspective, it is said.

And lastly, some employees come forward with supplementary meaning constructs regarding accident and incident reporting: The number of reports is important in an evaluation of MAIE safety efforts as the amount of reported issues often is compared with the numbers found at other plants within the corporation.

5.8. Safety statistics.

5.8.1. The set-up.

The MAIE reported accidents and dangerous incidents are registered by the safety manager and communicated through different safety statistics once a month to all levels of the organisation, including MAIE shift members and corporate management.

The most widely cited key safety figure is the "H-value" which stands for the number of injuries involving absence from work per 1 million work hours and the "F-value" which gives the number of sick leave days due to injuries per 1000 work hours. The less cited "h-value" stands for the number of reported injuries involving no absence from work. The MAIE official goal is to have an "H-value" which is less than 5,5, an "F-value" which is less than 75 and an "h-value" which is less than 55.

The numbers of equipment damages and dangerous incidents are shown in monthly reviews, and the date of the last injury leading to absence from work is also referred here. Besides, this date is communicated on a large wall board that is prominently placed in the production hall.

The quantification and visualisation of reported accidents and injuries into statistics and graphs are considered by MAIE managers to be an important tool to illuminate the MAIE safety situation, and the statistics are extensively communicated both internally and externally.

5.8.2. Key safety figures.

The "H-value" of MAIE for 1993 was 10,5 and the "F-value" was 165 (two injuries leading to absence from work). For 1994, the "H-value" was 9,5 and the "F-value" was 191 (two injuries leading to absence from work). For the first 10 months of 1995, the "H-value" was 5,5, and the "F-value" was 22,4 (one injury leading to four days' absence from work). The "h-value" is not presented in safety reports, but the number of injuries not involving absence from work is referred to in the monthly reviews, and I have mentioned examples and numbers in section 5.7.2. As can be seen, both the "H-value" and the "F-value" are based in worker absence due to work injuries. The "H-value" represents the number of injuries and the "F-value" describes their seriousness.

MAIE did not reach its safety goals for 1993 and 1994. This fact was frequently mentioned by MAIE managers in safety meetings and at other occasions, and the

need to pay strict attention to all safety regulations were emphasised as remedies to achieve better key safety figures in future.

It is difficult to find a MAIE employee who can explain explicitly what the different key safety figures stand for, and quite a few organisational members openly admit that they do not have a clue about what the values represent:

"The "F-value" and the "H-value" or whatever they are called are management issues. When they talk about them, I can understand if the numbers are high or not so high, but that's about all. I don't care much about them - what is important is what is behind the key safety numbers, and that is work injuries and accidents", one employee says.

Many MAIE employees agree to this statement. The statistical language that shapes their injuries into rather incomprehensible key safety figures seem to distance and alienate employees from these representations, and they frequently refer to key safety figures and other safety statistics as being primarily managerial "showcases". But even so – or because of this – safety statistical representations are one of the most widely discussed safety topics among MAIE employees.

5.8.3. The meaning of safety statistics.

As is the case with accident and incident reports, different meaning constructs are attached to safety key figures and safety statistics.

Front stage, MAIE managers and employees alike maintain that safety statistics are produced to give a picture of the plant safety situation for the sake of monitoring the effects of the safety work efforts. Based in this perception, key safety figures are looked upon as vital tools for the comparing of MAIE safety work with organisational safety goals and with the safety results of other companies within or outside the corporation. This acceptance of the espoused meaning of safety statistics is shared among the majority of MAIE organisational members.

Backstage, though, a large number of employees voice their belief that safety statistics can be interpreted in more than one way:

"Make no doubt about it that "H-values" and "F-values" have a specific meaning when it comes to managerial careers and the internal competition between the different plants within our corporation. If our safety statistics were unsatisfactory over a long time period, I am sure that someone from higher up would ask awkward questions. I am pretty confident this would hamper MAIE managers' further career prospects", one employee states.

"It seems to be very important for our managers that our key safety figures look nice compared to others'. They are extremely focused on our statistical results - sometimes it seems they are more focused on this than on the safety situation itself. One can only speculate about the reasons for this, but I believe it is important for them to keep up the image of MAIE as a safety conscious company", another employee says.

Even though this perceived overfocus on safety statistics is widely commented upon by employees backstage, it is seldom mentioned directly in discussions between employees and managers:

"They become upset if you hint that they are concerned with key safety figures of other reasons than to monitor and improve plant safety. This is an issue which it is unwise to talk about openly. They don't like you if you do", one employee says.

As a fieldworker I found that the issue of different interpretations of the importance of safety statistics was a question which was difficult to bring up among MAIE managers. When I raised it, I was told that there was no truth in the supplementary meaning constructs I had encountered among employees. Evidently, MAIE managers found the interpretations of their safety statistical focus as a matter of career promotion and status growth to be insulting.

5.8.4. Reliability of key safety figures: frontstage -

As I have commented upon in section 5.7.3., there is common acknowledgement at MAIE that all "reportable" incidents are not duly reported. Thus, MAIE safety statistics – as also is the case with all other companies' safety statistics, MAIE employees and managers argue - are not exact representations of the plant safety situation.

MAIE managers as well as employees reflect about the possibilities to "cheat" on the statistics in order to produce "good" key safety figures. Stories are told about the old MAI days when incentives to hide injuries to keep them out of the safety reports were strong, and examples of perceived statistical manipulation in present-day companies are also cited. And even within MAIE's own corporate group there can be raised doubts about the reliability of some plants' key safety figures:

"The culture for reporting is different from one company to another within our group, and consequently, I think that key safety figures coming from some plants are not easily comparable with safety results from other plants. Even though we all have the same rules for reporting and the production of key safety figures, I have a feeling that some plants try to "improve" their safety results", a MAIE manager says.

The reliability of the MAIE safety statistics is commented upon by one of the managers in this way:

"If our safety statistics leave something to be desired, it has nothing to do with a wish to keep incidents away from the statistics. Our hope is that persistent encouragement of more extensive reporting will produce ever more reliable safety statistics in the future".

According to this frontstage interpretation of the reliability of key safety figures, there may exist a statistical reliability problem also at MAIE. But if MAIE key

safety figures are less reliable than they ought to be, this is not due to conscious statistical manipulation, but rather the result of unsatisfactory reporting routines.

5.8.5. - and backstage.

Most MAIE employees share the perception that their managers focus too strongly on the statistical safety results, and they argue that this focus at times is accompanied by a greater concern for the key safety figures than for worker injuries and safety improvement work. Consequently, the reliability of MAIE key safety figures is much discussed in backstage settings, and MAIE employees may become quite emotional when the issue is on the agenda. A distrust in the communicated results can often be heard:

"The safety statistics which they constantly brag about don't represent the real safety situation at all. That is why we look away at shift safety meetings when managers present them on the overhead projector. We know they would have looked differently if everything was reported. The worst is that managers more or less force injured workers back to work before they are healed in order to save this "H-value". It is disgusting, and it shows that their obsession with the statistics take priority over the needs of injured workers", one employee says.

When a worker becomes injured, his absence from work will influence the "H-value" if he is absent from the day after the injury took place. And the more days a worker is absent, the more this will affect the "F-value". The MAIE focus on these key safety figures has in many employees' perception led to a "ban" of being absent due to work injuries:

"You can't be away from work because of a work injury any more. This focus on those values has become quite absurd. You know, they call people at home and even visit them to "ask" them to come back to work. They say it is important not to become socially isolated, and that is supposedly why they offer an injured worker an easier job - usually some kind of meaningless copying work - in order to get him back to work soon. But we know this is bullshit. Why don't they do the same when

we are absent from work for other reasons? We never hear a word then," one worker says.

One worker who injured his ankle and was taken to the hospital for x-raying tells: "While I was on the stretcher, ready to go to the hospital, I was asked by a manager if I would be back at work next day. This was very hurtful since it seemed to me he was more concerned about the safety statistics than of my health condition".

MAIE managers argue that this worker - and other workers who relate similar stories - have misunderstood their intentions for wanting to get people back to work soon. Management's low credibility in these matters, though, is based upon situations like the following:

Another worker than the previously mentioned one also injured his ankle at work. He went to the doctor, was treated for the injury, and stayed at home the next day since he could hardly walk. One of the MAIE managers called him and said that if he would like to come back to work at once, they had an easy job already arranged for him. The result of the phone call was that the injured worker took his car and showed up at work.

As his ankle was badly damaged and he hardly could stand on his feet, it was evident for all - including MAIE management - that he had nothing to do at the plant, and he soon returned home for a sick leave. But the incident angered both his work colleagues and the trade union representatives, and MAIE management admitted that the incident never ought to have taken place. Their explanation for why it nonetheless happened was that they had no idea his injury was as severe as it actually was.

"This is a good example of how MAIE managers try to manipulate key safety figures. Their main goal is to keep the statistics nice-looking, and they don't care a damn if this collides with health concerns. And they talk about safety - what kind of safety is it to have a man drive his car when his foot is so badly damaged that he

becomes a dangerous driver? These incidents have to be stopped. We have told management so," a trade union representative says.

When I asked the injured worker why he went back to work, he said:

"They did not force me, so I guess I could have refused. But you feel a certain pressure when they ask you to come back soon, and they talked so nicely about how they had arranged an easy job for me and all, so I went".

It is argued among MAIE employees that it ought to influence key safety figures when a worker is unable to attend to his usual shift duties due to a work injury. If this becomes the case, then managerial incentives to drag people back to work in spite of their injuries would be smaller, and the safety statistics would become more credible, it is said. As it is now, the almost universally shared employee construct of a managerial wish to manipulate statistical results is very audible backstage, and it is said to be strengthened whenever employees encounter new situations that "confirms" this management "policy".

5.8.6. "I don't want to ruin the statistics".

"To ruin the statistics" is a phrase that is often heard at MAIE. It describes individuals' dislike of being the one who because of a work injury negatively influences "good" shift or plant safety statistics. When employees talk about the possibilities of becoming injured, many of them mention the statistical "results" of such an event as a supplementary burden to the injury itself.

"I think it would be awful if I were the one who ruined our shift safety statistics even if we are told not to think like this. But it is easily said - what would you feel if just before your shift had accomplished four years with no injuries causing absence from work, you were the one who wrecked this record for all the others?" one employee says.

"Our shift supervisor is concerned that we should not go around and worry about ruining our safety statistics. We often talk about the possibility that one of us becomes seriously injured, and we emphasise that we will be very supportive of the unlucky one. But I don't know - I hope it will not be me. I think it would be a relief if after a period of for instance two years management would say: "Now you start all over again - today is day zero in your new safety statistics period". The pressure becomes higher the more outstanding our safety record is", another employee says.

When an employee "ruins" the safety statistics, it may lead to rather curious consequences, as was the case during my fieldwork period when an injury involving absence happened just a short time before MAIE would have reached a one-year-period of no injuries causing absence from work. It was a well-known secret that on the day of this anniversary, all organisational members were to receive a bicycle helmet as a token of the accomplishment. But when the accident took place, this plan had to be altered. It was rumoured that the helmets were labelled with stickers marking the safety anniversary, and these had to be removed before the helmets were handed out on a later occasion under some other pretext than that of outstanding safety results. The story caused many laughs at MAIE - but it also caused concern about how the injured worker felt: His "ruining" the statistics was really noticed, but fortunately, he was a confident person who had fewer problems with this than more unsecure persons would have had, it was said.

The large production hall wall board where the date of the last injury causing absence from work is shown produces negative comments from several MAIE employees. One of the persons that himself has experienced a serious injury says:

"It is not particularly pleasant to be reminded about your accident every time you walk along the production hall. Even if my name was not on the board, everyone knew that it was about me. I didn't like it".

Also employees who themselves have not experienced to "ruin the statistics" show concern about what they consider to be an illumination of colleagues' accidents. It is not necessary to display this information in such a prominent place, it is said.

MAIE managers are well aware of the employee notion of "ruining the statistics", and they regret that such worries exist within the MAIE safety culture. To counteract this, the safety manager in particular is active in telling shift members that key safety figures are unimportant as anything else than a measurement of what has happened safety-wise.

"But although I emphasise this as often as I can, I am aware of the ambiguities involved in this issue. I really mean that they are not to worry about the statistics - it is their health that matters - but at the same time I know they will worry since we do focus on key safety figures and the time lapse since the last injury leading to absence from work. I think this focus is necessary in order to keep our safety alertnessbe, but I don't find this situation particularly easy", says the safety manager.

Whether fear of "ruining the statistics" has led to avoidance of reporting injuries cannot be documented, and neither can it be documented that this fear promotes more attentive work behaviour. What can be said, though, is that the notion holds a central position when MAIE employees interpret their safety reality.

5.8.7. Safety statistics and employee ambiguity.

MAIE employees feel distanced from the language of safety statistics, they distrust statistical results, and they admit to having fears of "ruining the statistics". But in spite of this, employees maintain - as has been mentioned in section 5.8.3 - that the MAIE safety statistics offer important accounts of the plant safety situation.

This employee acceptance of safety statistics takes place for instance when MAIE workers compare their plant's safety results with those of other plants. Also when a safety evaluation of the different MAIE shifts is on the agenda, safety statistics are

utilised in a seemingly undisputed way to establish a shift's good safety work - or the opposite.

The ambiguity in employee evaluation of safety statistics can be looked upon as being the result of situational circumstances. When MAIE workers want to rank themselves in a safety "hierarchy" either as an organisation or as a shift group, the safety statistics are their means of doing so. In such situations, their backstage critique of safety statistics has to be kept away.

5.8.8. Safety statistics: a summary.

The MAIE key safety figures and other safety statistics hold a prominent place in the MAIE safety culture. They are communicated extensively in order to visualise the results of the MAIE safety efforts.

MAIE employees feel distanced to the language of safety statistics, and they consider the statistics to be managerially "owned". But the issue of safety statistics is widely debated in employee backstage settings.

The official - and generally shared – interpretation of the safety statistics is that they depict a picture of the present MAIE safety situation for the sake of improved safety. A supplementary meaning construct which is found among employees states that the statistics are vital for managers' career prospects and status within the corporation.

In MAIE frontstage situations, it is argued that the reliability of the plant's key safety figures is fairly good in spite of the acknowledged problem of under-reporting. Backstage, though, a widely voiced distrust of how key safety figures are constructed can be found. A frequently mentioned reason for this distrust is that employees have been "asked" to come back to work in spite of being injured. Such incidents are looked upon as "evidence" of the perceived managerial focus on safety statistics, and it is argued that this focus diverts attention from "genuine" safety and health issues. The statistical focus is also emphasised in MAIE employees'

concerns about not wanting "to ruin the statistics". Although such worries are verbally fought, their existence is not found to be surprising by MAIE management, due to the prominence of safety statistics in the MAIE safety culture.

In spite of profound employee back stage criticism of safety statistics, though, key safety figures are frequently utilised by MAIE employees when they evaluate the safety situation at different shifts and when they compare MAIE to other companies.

5.9. Safety ceremonies and rewards.

5.9.1. The set-up.

When a shift group has worked for a year without injuries leading to absence from work, this achievement is celebrated at a shift safety meeting where MAIE managers provide verbal praise as well as flowers to all shift members.

When several injury-free years have passed, a shift group will be publicly recognised as information of the achievement is prominently displayed in the production hall. The shift celebration at the safety shift meeting will be more elaborate than is normally the case, including the serving of an excellent meal. No significant material rewards are presented to shift members on such occasions.

5.9.2. Evaluation of safety ceremonies and rewards.

"In our safety celebrations, it is focused upon the good safety work we have done, and I appreciate that. Often, we hear about safety blunders and the need to improve our safety work, so it is nice that the things we do right also are noticed," one employee says.

He is echoed by many in this appreciation of safety ceremonies, and it is a widely shared perception among MAIE managers and employees alike that such ceremonies are important in order to keep up the plant safety motivation.

MAIE's choice not to give material rewards for good safety results is applauded by MAIE employees. Pioneer workers remember the "silver spoon days" of previous years when outstanding safety results were rewarded more substantially than they are now, and it is considered an improvement that the incentives to manipulate safety statistics because of material prizes do not exist anymore. This viewpoint is widely shared among MAIE organisational actors, and it is included in the official MAIE safety rhetorics as well.

But supplementary points of view can be found among MAIE employees. It is questioned whether the fear of statistical manipulation in connection with material prizes is overrated, and it is argued that some kind of material rewards probably would motivate further safety efforts.

"I think we are so safety-conscious today that we would not "hide" unsafe events in order to win prizes - providing the prizes are not extremely valuable. I do believe that safety prizes would promote a sound competition between shifts to become safety 'winners', and I think our managers are too afraid to utilise the motivational forces in a nice prize. Many people agree with me, but this is not something that one talks about loudly, since it counteracts the official views about safety rewards", one employee says.

5.9.3. Safety celebrations and safety statistics.

Safety celebrations are intimately connected with the MAIE safety statistics. As I have shown in section 5.8, MAIE employees backstage question the reliability of these safety results, and the statistical distrust may also lead to a questioning of the grounds for shift safety celemonies. The skepticism seems to be strongest when a shift celebrates several years of injury-free work.

"We all know that the more years a shift has had no injuries leading to work absence, the greater becomes the pressure to keep the shift record clean. When the statistics proclaim many injury-free years, I think there is reason to be suspicious about the production of these statistics. So this is why shifts celebrating many years

of outstanding safety results might be looked upon with some mistrust by many of us", one employee says.

When commenting upon a MAIE shift which was celebrated for exceptional safety achievements, one employee stated:

"This is really ridiculous. Of the shift members who are praised today, I think that two or three have been at the shift all these years. The others are newcomers while previous shift members are spread to other shifts. This situation really shows how hopeless it is to measure shift safety results in any sensible way - and how hopeless it is to celebrate safety results in a manner that is perceived as fair by all of us".

These are all backstage comments and they are voiced by members of shift groups that are not in the process of being celebrated. Even backstage I never heard critical statements from shift members who were involved in actual shift celebrations themselves.

"Jealousy is a main force at MAIE", one employee says. "If someone receives something which is not attainable for everyone at the same moment, then you can be sure that many signs of jealousy will be displayed. There is a constant monitoring of others' work conditions, and if something looks slightly more favourable at one work station, then you can be sure that the bickering will start immediately".

This employee interprets skepticism and ridicule of other shifts' safety ceremonies as being based in jealousy, and he is not the only one to argue that such feelings are prominent at MAIE. Others say that to doubt the safety records of other shifts but not one's own is quite normal behaviour:

"You will defend official procedures and official statistics when they work to your favour, even though you are convinced they are questionable in a more general way", one employee says.

Whatever the reasons, what remains a fact is that the statistical grounds for celebrations of outstanding safety results are scrutinised and often commented upon in rather unkind ways by MAIE employees - while at the same time they praise safety celebrations as motivating for further safety efforts. The seemingly unresolvable problem is what measurement tools to utilise to attain a commonly perceived fairness within the area of safety ceremonies and rewards.

5.9.4. Safety rewards or not?

During my fieldwork period, one MAIE shift was celebrated because of their seven years without injuries leading to work absence. The shift members received public praise and attended a dinner party during which they were presented with flowers and good words from MAIE management and representatives from MAI. The MAI internal newspaper also covered the event.

Not long after the celebration, it became common knowledge that this shift was going on a study tour to one of MAIE's customers in order to gain improved insight into the quality requirements of this profiles purchaser. MAIE managers also explained the tour as a result of their belief in the importance of letting employees see what happened to MAIE products further down the road as this would improve work motivation among shift members. A tour like this was a very rare event of recent years at MAIE.

The shift tour lasted for a couple of days and included an overnight stay at a hotel. It was evaluated by the participants as very successful, both regarding what they saw and learned at the customer plant and regarding the social benefits for the shift group by being together like this.

This tour became a much talked-about issue among members of other shift groups. One employee said:

"I think it is fine that a work shift is given the chance to travel to a customer to see what goes on there, and I am sure that MAIE management would gain much by way

of enthusiasm and effort if this happened once in a while. But it never happens. So why does it happen now? There is one reason for that, of course. This whole "study tour" is a reward for this shift's seven-year safety achievement. We all know that, they know it, and even one of the managers admitted this to being the case the other day".

"So much for the "ban" on safety rewards, really. It will be difficult now for management not to send another shift on a "study tour" at a similar occasion. What I think is quite ridiculous is the way this tour is concealed as something else than it really is. If management wants to start a new policy concerning safety rewards, OK, do it. But I guess they find this a little too controversial to do openly, so they do it this way. I don't think they should, though, as it gives occasion for rumours and speculations," another employee commented.

These comments are representative for how MAIE employees outside the celebrating shift evaluated the event. Members of this shift were more ambiguous, though. Some of them stuck to the official definition of being on a study tour without any connection whatsoever to their safety achievements. Others expressed uncertainty about why they were chosen for the trip, and some said they supposed there was a direct connection between the tour and their outstanding safety results - which they found to be in good order.

MAIE management argued that the tour was a genuine study tour and that this particular shift was chosen due to its central position in the profiles production.

This event illustrates that the seemingly shared construct of being cautious about substantial safety rewards may be more ambiguous than what it initially looks like. What annoyed many MAIE employees was not the perception that good safety results were rewarded, but primarily the concealed way in which this reward was given - even though some had critical comments about the reliability of the stated results. Very few organisational members uttered concern about the more fundamental questions regarding the study tour/safety reward tour.

5.9.5. Safety ceremonies and rewards: a summary.

MAIE organisational members appreciate safety ceremonies. It is, however, a commonly shared perception that the managerial decision not to reward safety results in any substantial way is a correct one. But supplementary views can also be found: Some employees question whether the fear of statistical manipulation caused by more extensive rewarding is too much emphasised.

Safety celebrations and rewards are based in safety statistics, and employees' ambiguities concerning statistical reliability are evident in their assessment of the fairness of celebrations and rewards. Especially when shifts are celebrated for several years very of injury-free work, a distrust in the statistical result leading to the ceremony is apparent. Some MAIE employees argue that the criticism of safety ceremonies and rewards - which never is heard when one's own shift is the subject of attention - is based in nothing but jealousy. Generally, it seems difficult to find a basis for ceremonies and rewards that is accepted as just by all organisational members.

When one shift was perceived to be rewarded with a "study tour" for outstanding safety achievement, this caused debate because of what employees interpreted as a managerial "cover-up" operation in which any connections between the tour and the shift's safety accomplishments were denied. The fundamental issue of substantial rewarding was barely touched upon in the debate, and this suggests that the MAIE shared construct concerning safety rewards might be considerably more ambiguous than what seems to be the case at first sight.

5.10. The formal safety structure and organisational meaning.

5.10.1. The formal safety structure as an instrument of safety improvement.

The most straightforward and obvious meaning of the MAIE formal safety structure is to be an instrument for continuously improved work safety (e.g. Krause 1994; Wilpert and Qvale (eds.) 1993; Blockley (ed.) 1992). This aspect is emphasised by

most organisational members, and they repeatedly point to the importance of the formal safety structure when explaining what they perceive as the safety awareness culture of MAIE.

While emphasising the importance of the formal safety structure, many organisational members also state that the systems routines were more important in previous days than they are now. Then there existed more obvious safety deficiencies and safety challenges for the formal safety structure to deal with, and it is evident for everybody that the formal safety structure has been imperative for the creation of safety consciousness and improvement, it is said. Nowadays, substantial safety improvements are more difficult to notice because of what has been achieved through the years. It is thus suggested that the MAIE formal safety structure was more appropriate for the handling of yesterday's safety situation than it is today. Based on this, general talk about a need for renewal of the formal safety structure can be heard among MAIE employees and managers, without this being any central issue within the frontstage safety culture.

As a conclusion it can be stated that MAIE organisational members still by and large value what they consider the instrumental function of the formal safety structure. They agree to the idea that work safety results from the correct application of the rules and regulations of the formal safety structure (Gherardi and Nicolini 2000b). What also is important, it is argued, is that the MAIE safety focus continuously is kept alive by the mere existence of the formal safety structure routines. And besides, what is written down cannot be easily overlooked, it is also said. Thus, the formal system is considered to be a safety guarantee by organisational members.

5.10.2. The formal safety structure as symbolic manifestations of the safety culture.

Symbols represent something else than what it looks like at first sight (Alvesson and Berg 1992), and when interpreting symbolic meaning, other than instrumental features of the concrete event have to be taken into consideration (Pondy et al.

1983). One way to analyse the MAIE formal safety structure is to regard the structure and its different elements as safety symbols. Seen from this perspective, the existence of and implementation of the structure elements – shift safety meetings, safety statistics, safety training, etc. – can be looked upon as being more than instrumental means for safety improvement only.

The MAIE safety culture is the pride of most organisational members and it features dominantly in organisational rhetorics. According to Czarniawska-Joerges (1992; quoted in Gherardi et al. 1998), language is the medium of the culture, and thus, the MAIE safety culture becomes symbolically visible through the MAIE extensive safety rhetorics. And when employees and managers set out to explain the major traits of this perceived positive culture, they emphasise the presence of a general safety awareness and a constant safety focus which both are linked to the existence of the formal safety structure with its recurring and systematic safety manifestations. It may thus be suggested that the safety culture is made visible and trustworthy for organisational members and outsiders as well through both the safety rhetorics and the operationalisation of formal safety structure elements. The assurance of a perpetual upkeep of the MAIE safety focus is in this way embedded in the plant formal safety structure, and the structure becomes "evidence" of a committed plant safety culture.

Seen from this view, it becomes understandable why MAIE organisational members oppose the idea of removing any of the formal safety structure elements even if they may be ambiguous about their instrumental functions. When the structure elements are considered cultural expressions as well as instrumental tools of safety improvement, then the ambiguity that is caused by a perceived lack of instrumentality is overshadowed by a desire that the elements live on as visible manifestations of the MAIE safety culture. To remove safety structure elements may be interpreted as a weakening of the safety culture.

5.10.3. The formal safety structure as organisational rituals.

Cultural expressions that take place regularly and in which the same procedure is followed each time may be looked upon as rituals (Alvesson 1993). The meaning of organisational rituals can be considered to be both instrumental and symbolic, depending on what perspective is emphasised in the analysis. A symbolic perspective will state that rituals help to preserve organisational members' assumptions and beliefs and thus serve as organisational anchor points (Brooks 1997).

The routinised implementation of the MAIE formal safety system may be looked upon as ritual events which work to preserve organisational members' safety beliefs and values. Seen from this perspective, a significant function of the formal safety structure is to sustain and reinforce an unambiguous and stable safety culture.

The most obvious MAIE safety rituals are the ceremonies in which good safety results are being celebrated as is described in section 5.9. The purpose of these events is to reward the shift group for good safety performance. It is believed by managers and employees alike that such celebrations reinforce the values and norms of good safety work and promote further safety awareness.

But other safety structure elements can also be looked upon as rituals carrying a symbolic meaning – and are also in fact interpreted this way by MAIE organisational members. Shift safety inspections and shift safety meetings can be used as examples of such ritually perceived safety structure elements. As I have shown, these safety events are criticised backstage by many MAIE employees for their lack of instrumentality and innovative qualities, but in spite of this, they are considered to be important in their function as safety rituals. Many organisational members will argue that today, the ritual meaning of these recurring events is what is vital. Shift safety inspections and shift safety meetings may be looked upon as rather non-essential for safety improvements, but they are considered imperative events as their routine appearances are seen to reinforce the values and norms of the MAIE safety culture.

During some of these ritual safety events, shift members and MAIE managers meet. Many MAIE organisational actors praise this side of the safety rituals as an opportunity for cross-level communication and as a means of strengthening shift group cohesiveness. Seen from this perspective, it can be suggested that safety rituals operate to build positive social relations between shift members as well as between organisational members at different hierarchical levels. It can be argued that the cross-level relationship-building may contribute to taking the heat out of opposing backstage safety arguments and thus controls the existing ambiguities.

The well-known ritual safety events are seemingly difficult to oppose and change. They appear to have attained an organisational position of being taken-for-granted due to their state of "always having been there" and their perceived contribution to the MAIE safety history as well as their present functions. Thus, they may be likened to "sacred cows" which are exempted from open scrutiny and change efforts. Their "task" is to act as organisational anchors amid ambiguity and change (Brooks 1997) and thus contribute to the reproduction of organisational order and stability.

9.10.4 The formal safety structure as contributor to a distortion of safety efforts?

I have shown that safety structure elements can be interpreted as having diverse interpretations and not infrequently are perceived to comprise meaning that differs from what was originally intended by the safety structure designers. In addition to the already mentioned meaning constructs of the MAIE formal safety structure as cultural symbols and organisational rituals, organisational actors also point to the safety system's perceived importance for managerial career promotion and corporate status when they discuss the structure's functions. In this context, the MAIE safety performance is looked upon by corporate managers as an indicator of MAIE managers' leadership abilities – a situation that is commented upon by Dawson et al. (1984), thus showing it to be of more than local MAIE significance only. MAIE employees argue that these perceived functions promote a managerial focus on the formal safety system as such rather than a focus on genuine safety

improvements – a situation which could be potentially ruining for the long-term survival of MAIE as a safety conscious organisation, it is argued.

What takes place is said to be a managerial focus upon systems elements which are quantified such as key safety figures and the number of accident and incident reports. But also the other safety systems elements are emphasised in MAIE management's safety work. According to MAIE employees, this systems focus has led to an organisational safety situation in which safety issues outside the obvious realm of the formal safety structure are downgraded to low organisational priority. This systems focus may have at least two negative consequences:

The first one is the fate of the safety issues which do not fit easily into the preset systems categories or which may create problems for a smooth systems implementation. MAIE employees argue that these safety issues have difficulties in gaining safety recognition and entering the official safety agenda. An example of such an issue is the topic of shift and plant social relations that recurringly is debated among MAIE organisational members as a safety issue, but which seems to have difficulties to become incorporated into the safety categories of the formal structure and hence is dealt with rather cursory, according to organisational members. Another example is related to the long-term physical effects caused by the lifting of heavy profiles which have found no place in the MAIE formal safety system. A third example of how the systems focus is perceived to limit the scope of safety concern is the previously mentioned debate about the reported causes of accidents and dangerous incidents. Employees maintain that the reported causes frequently are too simple and unduly personalised and do not take into account the complexity of the work situation, and the focus on the formal safety system is said to prevent a further exploration into the issue. A last example of how MAIE safety efforts are perceived to being focused around systems concerns is the way employees interpret statistical results to be more important than health matters when people are asked to come back to work in spite of unhealed work injuries.

These - and other – examples work together to form a MAIE backstage interpretation of the formal safety system as having removed itself from its original

intention of being a tool to fulfil safety improvement goals to becoming goals in their own right (Merton 1968). Due to this system goals focus, many possible safety improvements are being overlooked, it is argued, as a smooth safety system management now is perceived to have taken priority over "what it's all about" - the continuous improvement of work safety. This backstage safety construct may have embedded a potential for worker demotivation in the long-term sustainment of the formal safety structure.

The perceived MAIE focus on the formal safety system safety in its own right may also have a second unintended consequence for MAIE worker safety motivation and enthusiasm. Many organisational members are occupied with what they perceive as the limited emphasis on their human worth in the bureaucratic structures of the formal safety system. They argue that the concern for their health and safety as humans and individuals is felt to have nearly disappeared in the language, the formalities and the systems focus of MAIE safety work. Feelings of alienation are especially voiced regarding the topics of key safety figures and the quantification of people's accidents into numbers and statistical representations.

This perception of being second in importance to the formal safety structure is said by many MAIE employees to initiate personal discontent and frustration. These emotions can be witnessed when the "what it's all about"-question not infrequently becomes an issue of debate in MAIE backstage settings. It can thus be argued that feelings of personal degradation are elements of the MAIE safety culture. The question to be raised is whether these employee perceptions function as emotional barriers for a whole-hearted participation in MAIE safety work.

Based on what is said here, it can be suggested that the MAIE focus on its formal safety structure contains elements that potentially may contribute to a distortion of MAIE safety efforts. Both the system's perceived exclusion of the complexity of safety issues and the argued dehumanisation of safety work can be looked upon as being potentially destructive for the MAIE safety vision of continuous and ever improved safety work.

5.10.5. The formal safety structure and organisational meaning: a summary.

An analysis of the formal safety structure's organisational meaning can be done from different perspectives. The most obvious is to consider the safety system with its recurring routines as an instrument for continuous safety improvement. Also, the existence of the formal safety structure works to keep the MAIE safety focus alive and is thus viewed as a safety guarantee by organisational members.

Another perspective is to consider the MAIE formal safety structure through the lenses of symbolic analysis. Seen from this point of view, formal safety structure elements carry meaning as symbols of the MAIE safety culture. They become "evidence" of a committed safety culture, and it becomes understandable that organisational members support the continued implementation of the structure elements even though they may point to a perceived lack of instrumentality.

The third way to analyse the meaning of the MAIE formal safety structure is through the concept of organisational rituals. From this perspective, the structure elements are significant as regular events around which organisational members congregate to preserve their safety beliefs as well as to strengthen MAIE social relations. The safety rituals seem to have acquired the status of organisational "sacred cows" and are seemingly not liable to open criticism and change. It can be argued that through these rituals, the MAIE safety culture is sustained and organisational order and stability is being reinforced.

Finally, it can be asked whether the formal safety structure also contributes to a distortion of MAIE safety efforts. Organisational members argue that the organisational focus on the formal safety system has led to a stronger emphasis on the implementation of structure elements in their own right than on the system's intended function of being a tool for safety improvement. This situation is perceived negatively to influence the organisation's capability and interest to be attentive to safety issues that do not fit into the system categories. The question is raised "what it's all about", and it is maintained that the systems focus misses the

complexity of the MAIE safety reality and thus contributes to distort improved worker safety.

Organisational members also point to what is perceived as an ignorance of human aspects in the bureaucratic structure of the MAIE safety system. They express feelings of alienation and personal degradation due to an interpretation of their health and safety coming second in priority to a smooth implementation of the formal structure. It seems relevant to raise the question if such emotions function as obstacles for an active and enthusiastic participation in MAIE safety work and thus contribute to a distortion of MAIE safety efforts.

SECTION D

CHAPTER 6

SAFETY IDEOLOGY

6.1. Introduction.

Czarniawska-Joerges (1988a) looks upon ideology as a world view containing a vision and prescription for action while Trice and Beyer (quoted in Weick 1995) define ideology as shared belifes, values and norms that help people to make sense of their worlds. Starbuck and Milliken (quoted in Weick 1995) state that values and beliefs are influential filters for people in their sensemaking processes. Beliefs are what people consider to be true, and values can be said to be ideal moral standards of behaviour that people will try to recognise in their organisational enactments.

MAIE's espoused safety ideology - what is said to be believed in and consequently is promoted as standards of behaviour - can be found in the plant safety manual. In a general statement, it is decreed that human beings constitute the plant's most valuable asset, and that the MAIE safety vision is to avoid all human injuries. It is further stated that all injuries can be prevented, that safety issues are equal in importance to other managerial work tasks, that continuous safety training is necessary, that good housekeeping is vital for improved safety, that all safety regulations have to be recognised by all organisational members, that everyone is obliged to prevent work colleagues' unsafe acts when possible, and that hazardous work situations are to be dealt with immediately. As a summary, it is emphasised that through continuous efforts, the MAIE safety situation can be controlled and managed, and that good safety is cost-effective. Time, effort, and money are the main components to achieve satisfactory worker safety, it is stated.

What will be the purpose of this chapter is to investigate into the MAIE ideological questions that emerge as central issues in the organisational safety debate. Included in this debate is frequently the question whether espoused MAIE statements also function as the organisation's theories-in-use, or whether they exist in official rhetorics only. A possible dissimilarity between MAIE espoused theories and theories-in-use (Argyris and Schön 1978) will thus be a part of my analysis. Goffman's (1959) distinction between organisational frontstage and backstage communities will be of vital importance in my forthcoming analytical endeavours.

6.2. What is safety all about?

Officially, MAIE safety work is about the prevention of work accidents, and there is - naturally enough - no dissensus about this general policy statement. According to employees, though, the question of what MAIE safety is about is a more complex issue than what it may look like:

"Managers do not have to worry about being injured themselves, and that makes the big difference between them and us in our safety thinking. When I do my job, I constantly have to think safety in order to protect myself from danger. They don't have to think like this about their own body and health. So safety is necessarily a much more personal issue for me", one employee says.

MAIE employees argue that a wish to avoid personal suffering is their main motivation for safety work. In employee perception, managers necessarily cannot share this feeling of personal safety resolution. This difference in motivational basis is said to have consequences for the way MAIE managers and MAIE employees respectively think about and handle safety matters. A nearness versus distance issue thus emerges in MAIE safety.

In chapter 5, I have touched upon the MAIE "what-it's-all-about"-debate when discussing employee arguments that the perceived managerial preoccupation with the formal safety structure has led to a distortion of what safety first and foremost is

about. A dehumanisation of the MAIE safety work is said to have become the result of this systems focus.

This debate suggests that differing ideological perspectives may exist between MAIE employees and MAIE managers in their safety thinking: Due to safety being a less direct and less personal matter for managers, their safety priorities will necessarily focus upon other aspects than those of employees.

It can be argued that MAIE managers' perpetual emphasis on the formal safety system is a natural safety priority seen from a distance/nearness dimension. It follows from this that a systematic and correct implementation of the systems elements will be of high priority. As I have shown, MAIE managers eagerly promote a safety systems focus as a main aspect of the MAIE safety ideology. MAIE employees share the emphasis on the formal safety structure. But their personal nearness to safety have established a safety thinking that goes beyond a mere adherence to the regulations of the formal safety structure. The safety system will play a second role if there appears to be conflicting interests between the systems thought and what safety is perceived to be about, it is argued. This ideological coherence and discrepancy becomes visible in backstage safety arenas when the MAIE safety philosophy is debated.

In this debate, employees argue that the MAIE frontstage safety philosophy leaves something to be desired when a human focus is concerned. The perceived bureaucratisation and dehumanisation of MAIE safety work are frequently cited as examples of this lack of desired emphasis. A recurring topic in the debate is the question whether injured employees more or less have been forced back to work before they were ready due to what is perceived as a managerial systems focus upon safety statistics. Employees will relate such examples to an inequality in safety ideology that is based in differing nearness/distance to concrete safety matters.

Different organisational positions will often account for different perspectives in organisational affairs, and this can be argued to be the case also at MAIE. In spite of the espoused and shared frontstage safety philosophy, it can be seen that

organisational actors at different organisational levels have differing foci when it comes to fundamental safety issues. The absence of everyday on-the-floor work experience makes managers less able to empathise with MAIE employees and their experienced safety concerns (DeJoy 1994). Based on these differences, it can be suggested that both unity and diversity characterise the MAIE philosophy regarding what safety is all about. The MAIE safety philosophy thus seems to be less coherent and more complex than what it appears to be in the espoused safety rhetorics.

6.3. Who is responsible for worker safety?

"I am personally responsible for my own safety. It is up to me to observe the safety procedures and attend to my work tasks in a way that prevents me from having an accident", one MAIE employee says.

"Here at MAIE, everyone is his own shift safety representative. That means that we all have to be just as aware of safety issues as the formal shift safety representatives, and we cannot blame others when things go wrong if we have been careless ourselves", another employee says.

Similar accounts are heard all over MAIE from employees and managers alike, and the verbal consistency - frontstage as well as backstage - that characterises the safety responsibility issue is striking. Due to its repeated recurrence and standardised wording, the statement about everyone being his own shift representative can be said to have assumed the character of an organisational slogan. As such, it can be interpreted as a cultural expression pointing to ideological assumptions of the MAIE safety culture.

As I have shown in section 6.2, many MAIE employees argue that their safety philosophy is founded in their direct and personal involvement with safety. It can be suggested that there is a connection between this personally based safety ideology and the responsibility for own safety which is repeatedly vocalised

throughout the plant. As one employee - who was seriously injured some years ago - says:

"When it comes to your own health and welfare, there is nobody you really can trust but yourself. I have learned so much. Today, I care for my own skin first and foremost".

The statement that safety is a personal responsibility is seemingly contradictory to the espoused image of MAIE as a safety conscious organisation due to its systematic and collective safety endeavours. This "privatisation" of safety issues is thus a feature of the MAIE safety culture that gives way to confusion and unclarity about fundamental questions in the MAIE safety ideology.

In spite of the personalised safety constructs, though, there exists no doubt in MAIE organisational members' minds about MAIE's overall responsibility for worker safety. Systematic safety efforts are considered to be the necessary framework for all safe behaviour, and without this structure being in place and duly implemented, it is seen as impossible for individuals to take responsibility for own safety.

Many employees also emphasise that a personal safety commitment is necessary for the formal safety structure to become implemented as intended. It can thus be suggested that the MAIE concept of personal safety responsibility is dependent upon the organisation's collective and systematic safety work – and vice versa. So what at first sight might have appeared as a contradiction between an individualistic versus a collective safety philosophy can be looked upon as coexisting approaches which are mutually dependent upon each other.

Backstage, though, MAIE employees argue that the personalised safety concept is not free from negative consequences seen from their points of view. One example of this is found in accident and incident reporting which I have discussed in section 5.7. MAIE employees argue that when causes for accidents and dangerous incidents are reported, individualised explanations are overrepresented, and accordingly, there is little concern about comprehending accidents from an

organisational point of view. This investigative focus naturally leads to an emphasis on individual corrective measures, and accident reports are dominated by suggestions for improved individual work behaviour in order to avoid further accidents and incidents. It can be argued that the personalised safety concept thus "backfires" in a way that can be considered dysfunctional for organisational safety learning due to a neglect of more complex causes for accidents and incidents.

Another example in which the personalised safety concept seems to take priority over collective action is in the area of non-acute work hazards, and especially regarding the lifting of heavy profiles. As I have mentioned previously, neither the reporting system nor safety training incorporate this safety problem, and it is left to the individual to cope with this risk situation.

A third example of an area in which a personalised safety concept seemingly has become dominant is the utilisation of personal protective equipment. As I have shown in section 5.5.3, it is considered an issue of individual discretion whether or not to oblige to all safety procedures involving the usage of protective equipment. It seems to be informally accepted that these decisions – and their potential consequences - are matters of personal choice and responsibility.

Based in these examples, the question can be asked if the personalised MAIE safety concept in the long run may contribute to a weakening of the collective safety philosophy in spite of what was earlier suggested about the coexistence and mutuality of the personalised and the collective safety approaches. The answer to this question can be tentative only. What is sure, though, is that once more, diversity and complexity are comprised in the MAIE safety philosophy in a manner that easily may be overlooked if the attention is focused around espoused rhetorics only.

6.4. The equality of production and safety issues.

In the official MAIE safety documents it is stated that safety issues are equal in importance to all other work operations, and MAIE managerial rhetorics frequently

emphasise safety's equality with production issues. Due to the statement's constant recurrence, it can be suggested that it has assumed the quality of an organisational slogan and thus appears to be a central aspect in the espoused MAIE safety philosophy.

MAIE managers argue that there is no discrepancy between the espoused values and MAIE's theories-in-use on this account (Argyris and Schön 1978). They support their argument by pointing to safety achievements over the years, how safety considerations are included in the planning of all new projects, and how shift supervisors are instructed to assure that the work process does not involve unsafe work acts because of production problems or delivery demands. MAIE managers also state that a safe work process is cost-effective because of its general quality promoting effects, and thus, it is rational to promote improved safety whatever way you look at it.

The equality issue is regarded by many MAIE employees to be less obvious and more ambiguous than it appears to be in managerial rhetorics, though. Backstage, the espoused statement is frequently confronted with what is perceived as the MAIE theory-in-use:

"At the end of the day, production issues do take priority over safety issues. There is no doubt in my mind about that. Especially in work situations that are out of the normal, like when equipment is not functioning or when important orders are queuing up, then production concerns are first on managers' minds. They of course don't tell us to turn a blind eye to safety procedures, but we all know when the production is of utmost importance, so we will stretch our safety limits a little in such situations. But we don't talk about it so much if we do so", one employee says.

"Of course production matters have first priority. It is a lie to say they don't, and it is understandable that they do. The reason we are here is to make profits for the company. We are all dependent upon MAIE's profit-making abilities, and the better economic results, the more secure is our job future. If we were to think safety according to the book at all times, then it wouldn't be possible for us to produce

with profits, I think. We have to rely on common sense and the employment of safety procedures in a sensible way", another employee says.

Other employees are less understanding and more critical when talking about the espoused equality between production and safety:

"Don't tell me that this much-talked-about equality exists in real life. It is fashionable to say it does these days, but I think it amounts to nothing but words. What is said in managerial speeches is not what I find to be the case in my daily work life", one employee says.

Another employee tells about an occurrence in which he was forced by his shift supervisor to go through with a work task he himself thought was unsafe:

"He told me to go on, and when I mentioned my safety reservations, he became angry. So I felt I had no other choice than to carry on, but I was frightened and I worked with much care. I was afraid of problems if I refused to do what he told me to. But I will never do such a thing again. My shift supervisor was reprimanded afterwards, and he has never asked me to do similar things again. But don't talk to me about safety having priority over production issues", he says.

One employee views the production and equality question from a different perspective:

"I can't believe that we are proud when we talk about equality between safety and production issues. What is more important than worker safety? If MAIE really was a safety conscious plant, safety ought to have first priority and should never be equalled to production issues. But this is far from the situation", he says.

As can be seen from these quotes, the espoused MAIE philosophy of equality between production and safety issues is by many employees perceived to be less obvious as a safety theory-in-use than what is argued by MAIE management. I hardly met a MAIE employee who did not point to perceived discrepancies between

what is officially said and work situations in which production issues have priority over safety. These statements are either based in personal experience from stressful work situations or in a general belief that when it comes to the crux of the matter, production concerns will "win" in the competition between production and worker safety.

I never came upon any MAIE organisational member, however, who wanted to get away with the espoused statement of production and safety equality. There seems to exist a shared wish among MAIE organisational members to hold on to the idea of equality as an ideal guideline for the plant safety work even though the interpretations of its function as an *actual* guideline is ambiguous and differentiated.

It can also be suggested that the equality statement comprises aspects that are considered beneficial by MAIE employees regardless of its perceived lack of "success" in many work situations. For example, the espoused production and safety equality is not seldom voiced by employees as an argument in internal debates, and it is said that the statement comprises "ammunition" that is difficult to disregard by MAIE management due to the central position of the equality issue in MAIE official safety philosophy. Lastly, the frequent referral to the equality issue is seen by many MAIE organisational members to support the sustainment of the plant safety focus, and it can also be suggested to have a symbolic mission both internally and externally in the promotion of MAIE as a distinguished safety organisation.

6.5. Can all work injuries be prevented?

"Human beings are our most valuable asset, and it is our goal that nobody suffers from injuries" says the opening line in MAIE's written safety philosophy. "All injuries can be prevented" is another statement in the same document.

Commonly heard at MAIE is this phrase: "Accidents do not happen, they are caused". In chapter 4, I have shown how this belief is supported by accumulated organisational experience during the course of MAIE safety development.

Commonly heard at MAIE is this phrase: "Accidents do not happen, they are caused". In chapter 4, I have shown how this belief is supported by accumulated organisational experience during the course of MAIE safety development.

These espoused statements do not give much leeway for ambiguity: It is possible to prevent all work accidents and injuries, and accordingly, the MAIE objective becomes to establish good enough safety routines to reach the goal of no human injuries.

As I have shown in section 5.8.1, MAIE management has quantified the plant's key safety figure goals. The aim is to have an "H"-value" which is less than 5,5, an "F-value" which is less than 75 and an "h-value" which is less than 55. These targets include and "foresee" a small number of accidents and injuries to take place at MAIE.

A paradox in the MAIE front stage safety philosophy is apparent here: On one side, a main goal is that no injuries happens. On the other side, MAIE managers seem to accept that necessarily, accidents and injuries will take place in spite of all good safety work, and they include this assumption when setting safety goals.

This inconsistency between espoused theory and theory-in-use became accentuated during my fieldwork period as it became common knowledge that similar differences between general goals and specific safety targets no longer existed in several other companies. Quite a few industrial plants – also locally - had decided upon zero as the target for their "H-value", their "F-value" and their "h-value".

The question that inevitably came forward was whether a zero goal policy ought to be adopted at MAIE as well. MAIE managers argued that it would be a mistake to proclaim a "zero safety goal organisation", and they defended their standpoint by pointing to realism in goal setting:

"As long as humans are involved in the production process, accidents will happen despite all efforts. The best we can do is to minimise such events, but we can never

erase them totally. I fear that zero safety targets will be demotivating for safety work since we probably never would not be able to reach our safety goals. So I prefer to stick to more realistic targets which we are able to reach by good safety work. But of course, we do work for zero accidents and injuries all the time. That is our overriding goal", a manager says.

Most MAIE employees agree with the managerial scepticism about formalising a zero safety goal ambition. They are certain that if a plant never seems to experience accidents, then this primarily is the result of manipulation of the safety statistics.

Some MAIE employees, though, argue in favour of a zero safety goal policy. They question the managerial reasons for not formalising what they all want to achieve, and they point to MAIE safety history and how the concept of "realism" in safety work has changed over time. They are convinced that zero safety targets would further improve MAIE safety work. The symbolic value of having such goals is also pointed to as they claim that organisational members would have reasons to be even more proud of MAIE as a distinguished safety organisation if zero safety goals were decided upon.

"I think this resistance against zero safety goals is hard to believe. I thought that zero accidents and injuries was what our safety work was all about. Maybe the real reason why they do not want to adopt a zero goal is because they will avoid the extra safety efforts that would be necessary to reach such a goal? This is a pathetic debate, and what is really hard to understand is the negative views of many of my work mates", one employee says.

It can be concluded that most MAIE organisational members answer the question whether all work injuries can be prevented in an ambiguous way. The general answer seems to be a "yes" to the stated question, while the answer turns out differently when it is related to the more specific MAIE work situation. Thus, the inconsistency between the espoused philosophy and what is thought to be possible in practical life seems to be accepted by the bulk of MAIE organisational members.

This acceptance also constitutes the basis for the widespread resistance against a MAIE zero safety goal policy.

The organisational challenge is to keep the divergent interpretations of the accident prevention goal separated from each other. As long as this is achieved, the espoused MAIE accident prevention philosophy exists without being embarrassed by the MAIE theories-in-use.

6.6. Safety ideology: a summary.

The question of what safety is all about is answered unambiguously in espoused and shared MAIE frontstage statements: It is about the prevention of work accidents. No organisational members disagree in this fundamental perspective of MAIE safety work.

MAIE employees nevertheless argue that due to managers' and production workers' different organisational positions, different interpretations of this safety philosophical statement necessarily will exist among them. A nearness versus distance perspective emerges as a result of organisational members' dissimilar liability of becoming injured, and this difference is said to account for what is perceived as different safety approaches between MAIE employees and managers. MAIE managers' personal distance to safety problems is perceived to be mirrored in their focus on the formal safety structure. MAIE employees argue that safety first and foremost is to do with their personal welfare, and although they give frontstage support to the systems focus, they are – backstage – concerned about the system's perceived lack of a human emphasis.

The espoused frontstage consensus is thus being supplemented by differing perceptions of what safety is all about. This situation reveals organisational unity as well as diversity in the internal interpretation of a major MAIE safety philosophical question.

The question of who is mainly responsible for worker safety is related to the issue of what safety is all about. MAIE organisational members are in no doubt that safety responsibility first and foremost is a personal matter, and this conviction is based in their previously cited perception of personal nearness to safety issues. This "privatisation" of safety efforts may seem to contradict the espoused collectivity of the MAIE safety efforts, but by closer look it is found that the collective systems approach is perceived to be the necessary framework within which personal safety responsibility can be assumed. The collective and the personalised safety approach are perceived to be dependent upon each other as mutual contributors to MAIE safety.

But disregarding the mutuality, examples are found which suggest that the personalised safety concept is given organisational priority. The question has to be stated whether this situation in the long run may weaken the collective philosophy of MAIE safety.

The equal organisational status of production and safety issues holds a prominent position in MAIE official safety rhetorics. MAIE managers maintain that there is no discrepancy between their espoused statements and the MAIE work reality, while employees backstage argue that what they experience in their daily work is a clear production emphasis over safety concerns. Some employees find it fully understandable that the espoused equality is overlooked, while others are critical to what they experience as a gap between espoused theory and theory-in-use.

But disregarding ambiguous perceptions of the equality implementation, the statement is valued by MAIE employees for its ideal intentions, its possible utilisation as an argument in internal safety debates, as a contributor to the strengthening of the MAIE safety focus and as a symbol of MAIE as a distinguised safety organisation.

According to the official MAIE safety philosophy, all accidents and injuries can be prevented. What seems to be a paradox, though, is that when MAIE safety goals are quantified, an anticipated number of accidents is included. Based on this, it can

be asked whether the rhetorics regarding the prevention of all injuries is a genuine organisational assumption.

Due to other plants' adoption of a zero injuries goal policy, the discussion is raised at MAIE whether or not to choose this safety approach. Most MAIE organisational members are sceptical to this strategy because of what they consider to be an unrealistic attitude to human work behaviour and the fear of statistical manipulation if zero injuries became the goal.

The analogous existence of differing assumptions concerning the possibility to prevent all accidents and injuries illuminates ambiguities within the MAIE safety philosophy. And as long as the divergent constructs are kept separated, neither the espoused safety philosophy nor the MAIE theories-in-use become embarrassed by the incoherence between them.

In chapter 5, I have shown that differences in safety perceptions are not uncommon traits of the MAIE safety culture. Now, differences of safety philosophy have also been established, and it can be stated that unity as well as complexity and fragmentation exist at the MAIE safety ideological level.

CHAPTER 7

THE SAFETY CULTURE - SHARED, DIFFERENTIATED AND FRAGMENTED?

7.1. Introduction.

Both in chapters 4, 5, and 6, the MAIE safety culture has been brought to analytical attention. Now it is time fully to concentrate upon the safety culture in an effort to bring together cultural elements from all corners of the MAIE safety world.

In this chapter I will do an analysis of the MAIE safety culture based in data from my previous chapters. I will investigate into the espoused frontstage safety culture as well as the backstage safety cultures in order to present a comprehensive cultural picture of MAIE as a safety organisation.

7.2. The integration perspective.

7.2.1. A shared safety culture.

In the investigation of the MAIE safety culture from an integration perspective the focus will be upon the culture as a consistent and unifying force (Deal and Kennedy 1984; Trice and Beyer 1993; Martin 1992). It will be the aim of the analysis to investigate into whether the MAIE safety culture comprises assumptions, values, beliefs, frames of reference, etc. that are shared among organisational members to such an extent that it is plausible to talk about a shared MAIE safety culture.

7.2.2. Shared perceptions of the safety culture.

It is not difficult to find safety values and beliefs that are shared among MAIE organisational members. For instance, the historical reconstruction of MAIE safety in chapter 4 evidences widely shared perceptions of the present safety situation

which are based in shared interpretations of what has happened in the past. The possibilities for continuous safety improvements, the perception that accidents do not happen but are caused by human actions, and the necessity of structured and systematic safety work are shared MAIE safety assumptions that originate in interpretations of the MAIE safety history.

When investigating into the MAIE safety ideology in chapter 6, I found fully consensus about safety work's key task to be the prevention of work accidents. It is also agreed that primarily, each organisational member is himself responsible for his own safety and that everyone is his own safety representative. But simultaneously, it is a shared perception that MAIE as an organisation is responsible for worker safety. The mutual interplay between individual and organisational safety responsibility is commonly considered a central aspect of the MAIE safety philosophy.

The statement that accidents do not happen but are caused by human acts and thus can be prevented is also a shared concept of the MAIE safety culture. But it is also agreed that accidents inevitably will happen in spite of all good safety efforts, and this belief is manifested in the MAIE safety goals in where it is assumed that a certain number of accidents and injuries will happen. It is subsequently agreed by most organisational members that MAIE should not apply a "zero accident policy". Another frequently espoused and shared frontstage philosophical statement concerns the equal status of MAIE production and safety issues.

In chapter 3, MAIE organisational members state their perceptions of the main work hazards. They agree that a main reason for hazardous situations is work stress, and they also share the belief that work monotony produces danger. More varied work tasks would probably eliminate much of the smaller and more trivial work accidents, it is commonly believed.

The shared perception of the general importance of the MAIE formal safety structure has already been mentioned. When turning to chapter 5 and the more specific structure elements, a shared appreciation of the shift safety representative

role is found. The same evaluation is given of shift safety inspections which are seen as vital for the monitoring of shift safety, but also for the up-keep of the general safety focus. Shift safety meetings are likewise commonly looked upon in this capacity, and it is also a shared perception that the occurrence of regular safety meetings is status-awarding for the shift in question.

Many safety procedures exist at MAIE, and it is a shared feature of the safety culture everyone is to comply with them. The safety procedures are looked upon as vital means of accident prevention, and their high number can be viewed as evidence of the well-developed MAIE safety awareness, it is commonly argued. There is also consensus among MAIE organisational members about the benefits of on-the-spot work and safety training so that newcomers can learn to cope with situational aspects of their work tasks. The way that experienced workers are used as trainers is commonly said to be an asset for the training efforts, and it is generally argued that training at MAIE is taken well care of.

It is a shared MAIE belief that the reporting of accidents, injuries and dangerous incidents is an important tool for safety development and learning, and also that through the years, increased reporting has led to improved safety. But even so, it is a shared construct that under-reporting exists at MAIE in spite of all encouragement to report.

Reported issues are communicated through safety statistics and key safety figures, and it is a shared perception that such activities promote safety consciousness and learning. The "safety competition" between plants and shifts that is perceived to arise from the statistical focus is also commonly looked upon as beneficial for safety improvement. What is also a shared feature of the MAIE safety culture is an awareness of the possibilities for "cheating" with safety statistics in order to present too glorious a picture of a plant safety situation. But the MAIE safety statistics are not manipulated and give a reliable picture of MAIE safety, according to frontstage consensual statements.

MAIE organisational members share the perception that safety celebrations are motivating for safety efforts. But it is similarly agreed upon that it is difficult to find tools which measure safety results in a "just" way. Also, the MAIE policy not to present substantial material rewards for good safety results is met with consensus.

Summarised from this, it can be stated that there exists a shared MAIE appreciation of the formal safety structure and its different elements. The structure is agreed to function as an instrument for improved safety as well as being a reminder of and a guarantee for a continuous organisational safety focus. Based in the formal structure a safety language has been developed, and this language is the shared frame of reference through which organisational members interpret, comprehend and analyse safety occurrences.

7.2.3. The safety culture as a shared culture.

As has been shown, consensus about historical perceptions and safety ideology as well as about specific elements of the present MAIE safety work is a distinctive trait of the MAIE safety culture. It can thus be suggested that MAIE organisational members share a unifying safety culture (Deal and Kennedy 1984; Trice and Beyer 1993; Martin 1992) in which coherence and non-ambiguity are core features. This MAIE frontstage safety culture is expressed in the many different safety manifestations of the formal safety structure and the official rhetorics that support and maintain it. The safety culture is shared by the MAIE organisational members, and in their perception their safety culture is unique and sets them apart from other organisations when it comes to safety attitudes and actions. They share a pride of being a part of this safety culture, and they argue in favour of a present-day preservation of the various cultural expressions even if they at times may doubt their instrumental safety value.

MAIE organisational members thus share a self-perception of being a successful safety company. They look upon themselves as having been through a positive organisational transformation safety-wise, and this process has resulted in a safety

competence which in their view exceeds most other companies'. Included in the shared self-perception of safety excellence is the notion of the maintenance of a continuous organisational safety focus, the perception of the plant's role as a model for safety efforts and a conviction that MAIE also in future will excel in safety commitment.

Different researchers (e.g. Brook 1997; Holland and Quinn 1993) are occupied with how the organisational culture models the world for organisational members by the construction and maintenance of collective knowledge structures. A culture may thus be looked upon as a system of meaning (Geertz, quoted in Alvesson and Berg 1992) through which people interpret their experiences and receive guidelines for action. When a culture is shared as has been shown to be the case of the MAIE frontstage culture, people will interpret and make meaning based on shared knowledge structures – a collective schema (Harris 1996; Isabella 1990). At MAIE, little variation in safety meaning can be found in frontstage situations, and due to the constant presence of collectively promoted safety manifestations in MAIE frontstage life, it can be argued that the shared frontstage safety culture dominates the image of MAIE as an organisation. This officially espoused safety culture with its frequent manifestations is supported by managers and employees alike, and it would be easy to end a cultural investigation at this point with the conclusion that harmony and unity are the only characteristics of the MAIE safety culture.

But warnings do exist concerning this integration perspective of research. Schön (1991) asks whether it is the case that a questioning of main assumptions of a shared culture may be looked upon as threatening to cultural unity, and thus is kept out of the way. Goffman (1963) raises the same question when he maintains how such discussions will be ruining for consensus and unity. When considering these arguments, it is unsatisfying to leave the analysis of the MAIE safety culture without a culture investigation based in other analytical perspectives as well. I want to look for cultural traits other than those that are visibly displayed in the shared and unifying safety culture. Goffman's (1959) concepts of frontstage and backstage arenas will be my main analytical tools in this endeavour.

7.3. The differentiation perspective.

7.3.1. Safety subcultures.

A differentiation perspective of cultural analysis questions a culture's unity and coherence and investigates into the possibility of finding several cultures within the same organisation (Martin 1992; Frost et al. 1991). Such subcultures are believed to be internally consisting of frames of reference and self-perceptions that differ from those of other subcultures.

What I will do in my culture differentiation analysis is to investigate into the MAIE safety culture to see if I can find cultural features that are in opposition to the shared ones I have analysed in section 7.2. I want to find out if there exists safety subcultures in spite of the shared and unifying front stage culture I already have suggested is a main characteristic of the MAIE safety culture.

7.3.2. Differentiated features of the safety culture.

What is a significant trait of the MAIE safety perceptions that are in opposition to the shared front stage ones is that backstage admittance is needed in order to discover them. But given such admittance, it is not difficult to find safety constructs that oppose the streamlined consensus of the MAIE frontstage safety culture.

The positive evaluation of MAIE's safety historical development is not contradicted backstage, but what is opposed by some organisational members is the seemingly never-ending emphasis on this historical process. It is argued that the "glory" of the past MAIE safety successes bars the organisation from present-day safety learning because of the strong belief in the once achieved safety competence. Instead of constantly looking back, MAIE ought to be more aware of and open up to other plants' safety accomplishemts in order to improve safety-wise, it is said.

In chapter 6, I have shown how MAIE employees maintain that because of different positions in the production process, MAIE managers and employees necessarily will have differentiated views regarding what safety "is all about". According to MAIE employees, nearness versus distance to potentially dangerous work situations account for differences of safety emphasis, and MAIE managers are criticised for their perceived dehumanising formal safety structure focus.

Many organisational members argue that a MAIE major stress-related work hazard is the reduction of employees that has taken place at many work stations over the years. Work stress is likewise created by unsatisfactory training, it is argued, and the role of work stress in accidents is underrated when reports are written, it is said by employees. All these perceptions are met with disagreement from MAIE managers.

Differentiated views are also found concerning the implementation of the MAIE formal safety structure. For instance, some shift safety representatives argue that the managerial reason for not creating an asked-for shift safety representatives' forum is the costs. By not addressing the wish, managers "prove" that costs mean more than safety improvements, it is maintained. That cost arguments regarding safety efforts are valid is always denied in the MAIE frontstage safety culture.

There are also contradicting views on shift safety inspections. Quite a few organisational members argue that the inspections are too routinised and too dominated by managers and shift supervisors to catch the "real" issues of what goes on safety-wise at the shifts. The safety inspections are too much concerned with good housekeeping and ignore more genuine safety issues, it is argued. Likewise, there exists divergent views about shift safety meetings. The regularity of the meetings is said to be unsatisfactory, and the way shift meetings are conducted is negatively evaluated by many employees – they are too standardised and too boring, it is argued.

MAIE safety procedures are generally complied with, according to MAIE employees. But there is no doubt that the procedures also are adapted to situational

circumstances of the specific work task, it is said. Such adaptations are done rather discreetly without many words about what is done. Especially, the utilisation of personal protective equipment is an area in which official safety procedures often are contrary to their stated intentions. MAIE managers claim they are unaware of such situational adaptations, and if they knew about them, they would immediately call a stop to such practices, they say.

Work and safety training is an area in which there exist distinctly opposing views from those of the espoused frontstage culture. Many of the MAIE new employees evaluate the received training as rather dissatisfactory, especially when compared to training programs they have attended at other plants. Quite a few experienced MAIE employees are also critical to the way newcomer training is practised, and they would like to see more systematic training programs being organised by MAIE management. And it is generally agreed backstage that MAIE neglects training to lift heavy profiles in ways that will protect worker backs and muscles from long-term injuries.

When talking about the reporting of accidents and injuries, many MAIE employees are concerned with what they perceive as an undue proportion of personal errors as explanations for work accidents. They oppose what they consider to be a too strongly emphasised personal safety responsibility, and they argue that often, the causes of an accident are found in the totality of the work situation – which rarely is mentioned in reports. Many employees also offer backstage perceptions of the importance of reporting that oppose the official frontstage ones: It is stated that a high number of reports is vital for MAIE managers in order to sustain the external picture of the plant as a safety conscious organisation. MAIE managers deny the existence of such a plant safety competition

Backstage, a significant amount of MAIE employees distance themselves from the way accidents and injuries are presented in the MAIE safety statistics as they argue that the statistical "language" makes them feel like statistical objects and not human beings. The espoused meaning of safety statistics is also contested: Is their most important function to come up with "good" safety figures in order to promote

managerial status and careers? As a "proof" of this perception, MAIE employees claim it is illegitimate to stay at home while injuries are cured due to "ruinous" effects on the safety statistics. MAIE managers emphatically deny this to be the case.

7.3.3. The safety culture as a differentitated culture.

The safety constructs that are cited here are contradictive to those of the espoused and shared MAIE safety culture. They are shared by varied numbers of organisational members, and they are all found in backstage situtations only. Here, oppositional safety perceptions seemingly live their legitimate lives in arenas where membership is restricted and where managers seldom are allowed entrance.

The backstage audiences may consist of members from one shift, or they may consist of members from several work shifts. I can find no evidence that work shifts form distinct safety subcultures or that work shifts are the primary tools for the formation of separate subcultural safety identities. Based on my data, I will suggest that there exists a broad and general MAIE safety subculture which is found backstage and is sustained by the majority of MAIE employees. This subculture is activated in different situations and settings by different participants, and it features safety perceptions that are in opposition to those of the frontstage culture.

Schein (1992) talks about subcultural groups sharing a language and common definitions of organisational reality. Through their backstage language – a safety subdialect which is different from the MAIE frontstage safety language - and their backstage frames of reference, organisational members create a distance to the official and shared safety culture (Goffman 1959) when their backstage subculture is activated. Such a creation of cultural distance is echoed by Brooks (1997) when he claims that subcultures develop differing identities based in their subcultural frames of reference and self-perceptions. It can be suggested that MAIE employees create and maintain a cultural distance to the shared frontstage safety culture through their participation in backstage subcultural activities.

But I cannot end my analysis of the MAIE safety culture by concluding that I have found a shared and unifying safety culture and a differentiated backstage safety subculture. My data material tells me that it is not possible to categorise all my findings within these frameworks. Both the integration perspective and the differentiation perspective advocate a cultural clarity and nonambiguity that I frequently found to be missing when I investigated the MAIE safety culture. I need to utilise yet another cultural perspective – the fragmentation perspective – in order to develop my analysis.

7.4. The fragmentation perspective.

7.4.1. An incoherent safety culture.

The clarity of the other cultural perspectives is questioned by a fragmentation perspective as the trade marks of an organisational culture are argued to be ambiguity, fluctuation, multiplicity, shifting alliances and incoherence (Martin 1992; Frost et al. 1991; Isabella 1990; Holland and Quinn 1993). It is maintained that organisations never can be looked upon as stable patterns of unambiguous meaning constructions and that organisational members' cultural models change according to situational aspects. Fluidity and instability are characteristics of any organisational culture, and the cultural clarity that often is established in cultural analysis is a result of the chosen research method rather than of what can be found empirically, it is argued.

When turning to this analytical perspective, I will concentrate upon what can be interpreted as unstable, incoherent and ambiguous aspects of the MAIE safety culture. I will investigate into whether the safety culture also can be looked upon as being fragmented.

7.4.2. Ambiguity and multiplicity in the safety culture.

It is not any straightforward task to go into my data material and clearly point to safety aspects that "evidence" fragmentation in the MAIE safety culture. Doubts

and ambiguity regarding data categorisation have been more prevalent at this analytical stage than previously. What I will try to show, however, is that within the MAIE safety culture there exists a multitude of perceptions which are distinguished by being ambiguous, incoherent and situational. Consequently, I have to abandon the "clarity" of the integration and the differentiation perspectives in favour of a focus upon multiplicitiy and fragmentation in the MAIE safety culture.

As is the case with MAIE safety perceptions which oppose the shared front stage ones, ambiguous safety interpretations will as a rule be found in backstage settings only. So again, Goffman's (1959) frontstage and backstage concepts are basic tools in my analysis.

Ambiguity can be found in MAIE employees' evaluation of the plant's much-talked-about safety development process. Although they praise what has taken place, some employees also wonder if something of value has been lost in the course of events: Has workers' job autonomy suffered because of the ever growing amount of safety regulations? It is also suggested that the MAIE formal safety structure can be a disadvantage for future safety improvement as the systems routines are repetitive and subsequently become boring. They are neccesary for the maintenance of safety awareness, but all the same they are a nuisance and a "killer" of safety innovation. A solution to this dilemma is not easy to find, it is said.

Ambiguities and multiple interpretations are also found in an investigation of the MAIE safety philosophy. As I have shown in chapter 6, MAIE employees argue that due to managers' and employees' different positions in the work process, a difference of safety focus is unavoidable. According to employees, managers' lack of personal identification with the dangers of daily work accounts for their strong emphasis on the formal sides of MAIE safety work. Employees, focus upon their own situational interpretations of what safety is all about, and these may or may not be congruent with official policies. Employees also ask whether the bureaucratisation of safety work – a necessary and successful process from everyone's point of view – has eliminated the "human touch" from MAIE safety work.

The perception that MAIE organisational members are personally responsible for their own safety is a central in the MAIE safety culture, but the question is also raised whether this premise works to undermine the organisational responsibility for worker safety. Another emphasised ideological statement is the espoused equality of production and safety issues. Organisational members frequently express doubts and ambiguities about the statement's theory-in-use qualities.

In chapter 5, I have shown that several specific elements of the formal safety structure are met with ambiguity among organisational members. Several shift safety representatives are uncertain about how to fill their roles, and they feel that their fellow workers have situational and changing expectations to them. My data material supports such fluctuating expectations of shift safety representative role enactment among organisational members. Their importance for safety improvement is also ambiguously evaluated by shift colleagues. But even those organisational members who do not consider shift safety representatives to be vital for safety improvement find it important to keep them functioning.

Organisational members are uncertain whether issues surfacing at shift safety inspections always are fixed according to procedures. And in spite of their appreciation of the inspections, they also question what they perceive to be an informal requirement to come up with a certain amount of issues on the inspection lists. They wonder if this "demand" prevents safety issues from being solved in the daily work situation so they can be "saved" for formal inspections. Another topic that is raised is where the "real" safety issues have gone – are they all solved, or is there a reluctance to raise more significant issues during inspections? Some organisational members will also claim that although shift safety inspections are important tools for safety improvement, it is a weakness that they are too dominated by managerial and supervisory safety perceptions.

Shift safety meetings are looked upon as important safety arenas, but they are also looked upon as boring occasions where one-way managerial communication dominates. And just as important as their safety function is their social function, according to MAIE employees.

When MAIE employees evaluate the plant's safety procedures, ambiguities and fluctuations become visible. At one moment, they complain about the high number of safety procedures as a nuisance in their daily work life. Another moment, the same employees claim that MAIE ought to have even more safety procedures than is the case now. In daily work life, employee adherence to safety procedures are based upon situational interpretations, and such situational safety decisions seem to be accepted as necessary and legitimate among employees. It is claimed that within limits, MAIE managers silently accept these multiple interpretations, although managers themselves deny this to be the case.

MAIE safety and work training is ambiguously evaluated by both managers and employees: Should the training be more formalised and standardised – or is the present informal on-the-spot training the best method? Managers know that shift supervisors differ in training interests and capabilities, and their doubts are said to be based in this fact. Many of the appointed shift trainers also express ambiguities about the training: They value the informality and the realism of it, but they would like to know more exactly what is expected of them as trainers. Generally, many MAIE employees have a similarly ambiguous interpretation of the plant's training program as they consider it to be both satisfactory and not satisfactory at all. It all depends on who is the appointed trainer, it is said.

The reporting of accidents and incidents is an area of MAIE safety which is fraught with unclearities, ambiguities and multiple perceptions. Although everyone agrees that all accidents and incidents ought to be reported, everyone also knows that this is not what actually happens. Many employees are uncertain about what are "reportable" incidents, and especially, they discuss the sense of reporting what is considered common "trade mark" injuries. It is also ambiguously evaluated whether sufficient feed-back and organisational safety learning are the results of reporting. Besides, MAIE employees acknowledge their personal anxieties about being the one to "ruin" good safety statistics, and they experience increased anxiety the more excellent the safety records are. At the same time, they are proud of good safety key figures as well as disliking them.

What key safety figures represent is an issue of diverse backstage interpretations. Employees may state that the statistics give a reasonably correct picture of the MAIE safety situation, while they also may state that the statistics are unreliable and their foremost function is to give a favourable picture of MAIE in a "safety competition" between plants. MAIE managers claim that the safety statistics in general are reliable accounts of the MAIE safety situation, but they also acknowledge that under-reporting is a statistical problem.

Ambiguous employee feelings also surround the big hall board on which the date of the latest work accident is prominently displayed. The safety focus function of the board is appreciated, but it also is a negative reminder for those who were involved in the latest incident, and it works to strengthen the anxiety about "ruining" the safety statistics, it is said.

Everybody agrees that it is unwise to reward good safety results in substantial ways because such a policy might inspire manipulation of key safety figures. But in spite of this, some organisational members wonder if this policy ought to be altered. Maybe the danger of manipulation is over-emphasised and material rewards would prove to be safety motivating? it is asked.

Modest celebrations of good safety results are appreciated by all organisational members. But doubts concerning the statistical results leading to a shift celebration are often audible: How can it be "proved" that a shift has achieved such and such safety results when it is well known that shifts may have different norms for the reporting of accidents and incidents? What is evident, though, is that such questions are rarely stated among celebrating shift members themselves.

A shift study tour that took place during my fieldwork period brought forward fragmented explanations as to its real reasons for taking place. Even among the touring shift members, ambiguity could be found: It was a study tour, but all the same, it was not unlikely that it was arranged because of the shift's recent achievement of seven years without serious incidents. And even if a safety excellence reason is "wrong" according to MAIE safety policy, it felt right that they

were rewarded in this manner, touring shift members said. Members of other shifts agreed to this, and said that what they disliked about the event was what they perceived as a managerial concealment of why it happened.

Summed up so far, it can be said that MAIE organisational members have ambiguous perceptions about many aspects of the MAIE formal safety structure's implementation. Since these perceptions depict fragmentation and unclarities in the MAIE safety culture, organisational members normally keep them backstage where they are considered just as legitimate as the shared safety constructs of the MAIE frontstage.

7.4.3. The safety culture as a fragmented culture.

Seen through the lenses of the fragmentation perspective (Martin 1992; Frost et al. 1991; Martin and Meyerson 1988), I have shown that the MAIE safety culture is characterised by doubt, fluctuation, multiplicity and ambiguity. Organisational members are ambiguous in their interpretations of safety events, their perceptions change according to situational circumstances, and they may simultaneously advocate different perceptions of the same event. This multiplicity of MAIE safety constructs is not captured in a culture analysis seen from the integration or the differentiation perspectives. As Gherardi and Nicolini (2000a), I have found that the idea of a shared organisational culture is a misleading way to approach an analysis of a safety culture.

Isabella's (1990) accounts of her data collection process also express my MAIE experience as she recounts how informant concerns shifted, reactions varied and perceptions were at the same time similar and diverse. The stability and clarity that seemed to be significant features of the MAIE safety culture both as a shared culture and as a differentiated culture is not dominant any more, and what surfaces is a safety culture that is fragmented, incoherent and situational (Quinn 1993).

Brooks (1997) argues that multiple interpretations of reality is the only "truth" to be found about organisation life, and he states that complexity has to be analytically

invited and ambiguity to be accepted as intrinsic characteristics of organisations. The fragmentation perspective has enabled me to illuminate the multiplicity of safety perceptions that exist at MAIE and to detect that these incoherent, situational and fluctuating interpretations are plentiful and recurring in the MAIE safety culture.

Seen from a culture fragmentation perspective, the MAIE safety multiplicity is not looked upon as examples of "irrational" and deviant behaviour or thought (Schutz 1967) which can be corrected by increased information, planning, higher motivation, etc. Instead, the multiple constructs are seen to represent organisational members' socially constructed realities (Berger and Luckmann 1967; Silverman 1970; Weick 1995) according to their situational interpretations which are built upon prior experience and learning (Porac et al. 1989; Holland and Quinn 1993). And as such, they are just as "rational" as any other more "consistent" cultural representations.

When summing up my cultural analysis so far, it can be suggested that the MAIE safety culture is a shared, a differentiated as well as a fragmented culture. According to Gergen (1992), tensions between organisational forces which simultaneously stand for unity, differentiation and fragmentation will take place in any organisation. Such tensions will exist in the MAIE safety culture as organisational members are both united, differentiated and fragmented in their safety perceptions. The next question to investigate into will thus be if the MAIE cultural mixture is sustained in a way that balances the tensions between organising and disorganising forces (Gergen, ibid.) in the MAIE safety culture.

7.5. Cultural coexistence in the safety culture.

The emerging picture of the MAIE safety culture shows a culture that is significantly more complex than the espoused frontstage culture. Organisational members' safety sensemaking processes in which people interpret and author, discover and create meaning (Weick 1995) have shown to be less streamlined than what is anticipated by first glance. Reed (1992) argues that organisational

members' interpretations of organisational reality either sustain an unstable sense of organisational reality or work to transform the organisational situation by new interpretations. The question to consider is how MAIE cultural diversity can be analysed in this respect.

Fiol (1996) states that meaning constructions often simultaneously will be varied and shared between organisational members. As I have shown already, this is a situation that is a common trait of the MAIE safety culture. Fiol (ibid.) also talks about a unified organisational diversity that is achieved when organisational members in spite of multiple interpretations share a framework for thought which is broad enough to encompass the differences. It will be a matter of analysis to decide upon whether this is the situation at MAIE.

Other dilemmas and organisational challenges related to the issue of unity and diversity have to be discussed. Among these are the internal organisational competition about "correct" meaning constructions (Silverman 1970) and organisational actors' labelling powers to define legitimate reality definitions (Czarniawska-Joerges and Joerges 1992).

As I have shown previously, the MAIE shared frontstage safety culture is sustained by rhetorics, rituals, acts and safety interpretations that are defined as legitimate by MAIE managers and employees alike. In my data material, there is nothing to suggest that the sustainment of this safety culture is the undertaking of MAIE managers or specific organisational groups only. To the contrary, there exists considerable evidence that the frontstage culture is shared and appreciated by the great bulk of MAIE organisational members. This culture is perceived to be instrumental in the perpetual development of MAIE safety, and its mission is supported by symbolic and ritual safety expressions.

This is the frontstage MAIE safety organisation – a world of harmony and unity, devoid of visible differences and ambiguities. It is looked upon as a unitary and "strong" safety culture which is considered effective in the promotion of improved safety (Gherardi et al. 1998b). But aided by Goffman (1959), I have been able to

define a backstage safety organisation which at times is in opposition to the frontstage one and thus forms a differentiated safety subculture. The most distinguished traits of the backstage safety culture, however, are features of ambiguity, multiplicity and changing and situational safety interpretations – a fragmented safety culture which is based in work-based and situational interpretations of safety efforts and safety structures.

My data material shows that MAIE employees sustain and create the MAIE safety cultures of both unity, differentiation and fragmentation, while MAIE managers concentrate on the sustainment of the shared frontstage safety culture. What can thus be said to be a significant trait of the MAIE safety culture is that all three mentioned cultural categories exist within the same organisation at the same time, being enacted by both the same and diverse groups of organisational actors.

This complex cultural situation is coped with due to a separation of arenas in which the different cultures are enacted. Frontstage, the shared MAIE safety culture is activated mainly by managers and is based in managers' powers to define legitimate and "correct" reality definitions (Czarniawska-Joerges and Joerges 1992; Silverman 1970). These are given frontstage support by employees, and they are not unduly challenged by oppositional or ambiguous safety constructs since employees consider many backstage perceptions to belong to organisational taboo areas. The tensions between organisational forces promoting unity, differentiation and fragmentation (Gergen 1992) are in this way held in check. As a result, organisational harmony and a united safety organisation with high safety awareness are MAIE characteristics seen from a frontstage point of view.

As a rule, then, the espoused and united MAIE safety culture coexists peacefully with backstage safety cultures. The result is an organisational equilibrium in which the multiple interpretations of the MAIE safety culture are allowed to exist in their designated grounds. There is reason to believe that this non-overlapping is a prerequisite for the cultural balance which distinguishes the MAIE safety culture. I have previously referred to extraordinary situations in which backstage constructs have "spilled over" into frontstage arenas and caused problems for the cohesiveness

of the front stage culture. If such situations became recurring events, this would potentially wreck the cultural balance and lead to a state of uncertainty and fragmentation of the organisational frontstage self-perception and espoused values. Today, as a consequence of the balancing forces of the MAIE safety culture, organisatonal members' interpretations of their safety reality work to sustain a sense of organisational stability (Reed 1992) rather than transforming the safety culture by backstage interpretations becoming dominant in open organisational spheres.

In a study of Italian construction site-managers, Gherardi et al. (1998b) found that good social relations and trust between managers and workers were important elements of their safety culture concept. These findings correlate with MAIE organisational members' safety concept. So when the complexity and fragmentation of the MAIE safety culture at times become visible, good relations and trust are at a low level, and informal negotiations are necessary to bring balance back to the culture. Such negotiations take place when MAIE managers assure employees that the situation which prompted the backstage culture to surface frontstage was an unfortunate event which will not be repeated. For example, balance-promoting negotiations have taken place after incidents when MAIE employees perceive that injured colleagues have been forced back to work because of managerial preoccupation with key safety figures. Another example of such negotiations is what happened in the aftermath of an event when an employee was told by his shift supervisor to carry out a perceived unsafe work operation. Work colleagues as well as the trade union became involved in negotiations with management, and the general perception that the shift supervisor "got problems" because of his behaviour seemed to reestablish the safety cultural equilibrium and made it possible to sustain a credible frontstage safety culture.

It can be concluded that the MAIE safety culture is complex and multifaceted, and that the complexity is sustained and held together by the existence of separate cultural arenas in which different cultural values and expressions legitimately are enacted. The next question to consider is how this cultural multiplicity affects the further improvement of MAIE safety.

7.6. The safety culture and safety learning.

The MAIE frontstage safety culture prides itself of being a culture in which continuous safety learning is a prime concern. As I have shown in chapter 5, learning activities are incorporated in the MAIE formal safety structure. Feedback from reported accidents and unwanted incidents is said to be a vital learning source, and when MAIE managers encourage increased reporting, the learning aspect is always emphasised.

Based on my analysis of the MAIE safety culture as being more complex and fragmented than the espoused frontstage one, however, the issue of the culture's learning facilities becomes more nuanced than what is suggested in the previous paragraph. Schön (1991) argues that people's knowledge to a high degree is shaped on a day-to-day basis during actions and reflections over actions, and according to Gherardi and Nicolini (2000a), safety learning occurs when people participate in communities of practice. This is also a significant trait of MAIE safety learning: Much safety knowledge which is based in organisational members' work experiences can be found – but mostly in MAIE backstage communities of practice where informal safety learning takes place continually.

MAIE managers are aware that a multitude of backstage safety evaluations and safety knowledge exist, but no conscious managerial efforts are done in order to "promote" the backstage constructs to the official learning spheres of the MAIE frontstage. And as MAIE employees have an intuitive understanding that their backstage safety knowledge is not welcome in frontstage situations, neither do they make any efforts to establish their backstage learning as part of the organisational frontstage learning system. Due to the separation of the MAIE front- and backstages, then, the bulk of the backstage safety learning rarely surfaces at the organisational forefront and is thus excluded from becoming integrated in the MAIE formal learning structures.

Hence, it can be argued that frontstage learning efforts are built upon rahter limited interpretations of the MAIE safety reality, and that the potential for extensive

organisational safety learning which lies in the wide, ambiguous and complex backstage definitions is not taken into account. A positive response to safety comments and feedback arising from the lower levels of an organisation is emphasised by Turner (1992a) as a prerequisite for safety improvement and learning. Gherardi and Nicolini's (2000b) discussion of safety knowledge and learning as being based in situated practice in constant evolution – the often tacit situated curriculums of a work place (Gherardi et al. 1998a) – emphasises the limitations in the MAIE formal learning structures where learning seems to be looked upon as the mere delivery of information from knowledgeable sources (Eckert 1993; quoted in Gherardi et al. 1998a). It is not speculative to suggest that the repertoire – and the creativity – of MAIE organisational safety learning would broaden significantly if backstage cultural elements were allowed to enter the MAIE frontstage learning spheres.

The richness and diversity of the MAIE backstage safety knowledge are missing in the frontstage stuctured learning situations which are routinised and predictable both in form and contents. The fragmentation of the MAIE safety culture and the subsequent separation of learning arenas initiate a formal learning process in which safety declarations and insistence on formal compliance are main objectives and which is not oriented from within different MAIE backstage spheres (Gherardi and Nicolini 2000a). The focus is upon the *finding* of safety solutions instead of upon the process of consciously *searching* for such solutions (Colville et al. 1999) among the totality of MAIE safety definitions. Thus, the full participatory potential of MAIE safety learning is not utilised, and the frontstage safety culture's emphasis on being a safety learning culture has to be looked upon as an espoused theory that may at times be - and may at times not be – consistent with MAIE learning theories-in-use.

When assuming that MAIE safety would benefit from a broader and more creative safety learning process, the next question to give serious consideration is what lies behind this wasteful learning situation that is brought about by the exclusion of backstage learning from the frontstage learning systems. It seems plausible to suggest that the previously discussed MAIE cultural balance which is based in a

coexistence of unifying, contradictive and fragmenting forces can be found at the core of this issue. I have shown how the internal balance of the MAIE safety culture is a prerequisite for the existence of a multiplicity of cultural manifestations in their designated organisational arenas. I have also shown how this equilibrium is threatened when values and norms belonging backstage "spill over" into the frontstage sphere and illuminate defects in the unity of the culture, thus causing organisational embarrassment (Goffman 1959). Seen in this perspective, it becomes "logical" and organisationally rational that safety learning built upon backstage evaluations cannot play any vital part in the MAIE formal safety learning processes. The benefits of an "opening up" for backstage learning contributions would be a broader knowledge base and the utilisation of multiple safety perspectives, while the dangers would be a change in the organisational knowledge stock which may cause disruptions in the united safety culture and lead to unwanted consequences due to a threatening of organisational stability (Gherardi and Nicolini 2000a).

MAIE safety formal learning and development can thus be seen necessarily to have to be based in safety knowledge and safety constructs that are derived from frontstage safety interpretations. The multiple backstage constructs will have to be kept in their designated arenas with the negative consequences this separation can be suggested to have for official safety learning and the improvement of MAIE safety.

7.7. The safety culture – shared, differentiated and fragmented?: a summary.

An analysis of the immediately visible MAIE safety culture has shown that organisational members share safety values, interpretations and frames of reference. This includes a shared appreciation of the MAIE formal safety structure as well as a perception of the MAIE safety culture as a unique and successful culture which distinguishes the plant from other organisations. Coherence and non-ambiguity are core features in the shared frontstage safety culture, and a collective system of safety meaning by which organisational members interpret their safety experiences and receive guidelines for action is thus constituted. This shared culture is

sustained by MAIE managers as well as employees, and it is a dominant trait of the image of MAIE as an organisation.

But the shared and unifying frontstage safety culture is one side of the MAIE safety culture only. Backstage, safety perceptions which oppose front stage culture ones can be found. These differentiated safety constructs often object to the streamlined frontstage interpretations of the formal safety structure's implementation. For instance, the frontstage constructs regarding accident reporting and safety statistics are met with opposing interpretations from many MAIE employees.

Distinct subcultural groups cannot easily be outlined, but what can be seen is that a large proportion of MAIE employees voice situational backstage safety interpretations that are in opposition to frontstage ones. From this it can be suggested that a differentiated MAIE backstage safety culture exists which is activated by different organisational members and groups under different circumstances, and that distance to the shared frontstage safety culture is created when the backstage culture becomes manifested.

Ambiguity and fluctuations are not captured in a culture analysis which concentrates on unity and differentiation only. At MAIE, there exists a multitude of examples that organisational members are ambiguous and incoherent in their safety interpretations and that their perceptions fluctuate according to situational circumstances. The stability and clarity of the shared and differentiated MAIE safety cultures thus have to be supplemented by a cultural perspective which focuses upon fragmentation and unclarity. Seen from such a point of view, ambiguous and fluctuating constructs are not looked upon as "irrational" and deviant, but rather as subjective and situational safety perceptions that represent organisational members' safety rationality in just as "proper" a manner as the unambiguous perceptions of a shared and a differentiated safety culture.

The complexity of the MAIE safety culture is thus established, and the next question to consider is whether the cultural diversity works to sustain or to destabilise the plant safety culture. The concepts of frontstage and backstage arenas

are productive in this analysis, as the shared safety culture is the only one that legitimately exists frontstage, while both a differentiated and a fragmented safety culture are found in backstage surroundings. This MAIE cultural multiplicity becomes manifested in parallel processes that may be enacted by the same organisational members, and this is possible because of the separation of enactment arenas. In this way, the shared safety culture is enacted frontstage without interference from the oppositional and ambiguous cultures of MAIE backstage and vice versa, and a MAIE cultural equilibrium can be argued to exist in which multiple cultural interpretations are allowed to come forward in their designated areas.

This situation is the normal state of the MAIE safety culture, but at times, the complexity and fragmentation of the culture are visible in open arenas due to extraordinary events. After such occurrences, negotiations between MAIE managers and employees are necessary to bring the required cultural balance back to the organisation.

MAIE prides itself of being a safety learning organisation, and systematic safety learning efforts are incorporated in the frontstage routines of the formal safety structure. Backstage, informal safety learning which is built upon differentiated and fragmented safety perceptions takes place. Due to the separation of the MAIE cultural arenas, though, this safety knowledge as a rule is kept backstage and thus not included in the officially recognised organisational safety learning efforts. As a result, the formalised MAIE safety learning is based in limited interpretations of the organisational safety reality, and the wider potential for safety learning that lies in the safety cultural complexity is not explored into.

This "aborted" learning situation seems to promote a waste of improved safety possibilities, but when seen from the perspective of the MAIE cultural equilibrium, though, such a situation can be argued to be organisationally rational. The opening up for backstage safety knowledge into the spheres of the formal frontstage learning structures would be accompanied by the danger of disrupting the cultural balance which is an essential feature of the MAIE safety culture.

CHAPTER 8

LOCAL KNOWLEDGE

8.1. Introduction.

The purpose of my research has been to do an exploratory study of MAIE safety which focusses around organisational actors' subjective safety sensemaking processes. Guided by this theoretical perspective, it has been my aim to produce an organisational safety analysis which includes both visible and hidden safety representations and enactments. In this last chapter it is my first intention to summarise my knowledge about MAIE within the theoretical framework I have chosen to utilise. Thus, local MAIE knowledge based in the MAIE safety plurality is developed, and this leads me on to outline what I consider to be the most distinguishable traits of MAIE as a safety organisation. Finally, I will discuss my work in a broader context, also suggesting directions for further safety research.

8.2. Ethnography and the construction of local knowledge.

I have utilised an ethnographic approach in this work. An ethnographic approach is a way of thinking about and doing organisational analysis in which the researcher attempts to involve herself with her research "body" by observing and participating in organisational life in order to explore into organisational meaning constructs – formal and informal – on all organisational levels. This involvement of mine has taken on the form as a long social process of coming to terms with the MAIE culture (Van Maanen 1988). In the course of the exploration process, I have attempted to carry out my work without a priori research categories in my luggage, and I have previously in this thesis shown that I have revealed many organisational layers of assumptions, skills, and practices due to my ethnographic approach (Pollner 1987). My obtained organisational insight is presented through thick descriptions of MAIE organisational actors' safety meaning constructs in a way that does not separate the constructs from the organisational context in which they take place – the essence of being an ethnographer, according to Geertz (1993b). By the

utilisation of a wide and inclusive ethnographic approach, it has been possible for me to establish MAIE organisational members' safety sensemaking in frontstage as well as in backstage arenas.

It has not been my goal to establish general theories about MAIE safety based in my research process of ethnographic fieldwork, data collection and analysis of MAIE safety. Geertz (1993a:4) claims that "... the shapes of knowledge are always ineluctably local, indivisible from their instruments and their encasements". He as well as post-modernist writers have convinced me about the futility of a venture aimed at producing "grand narratives" or generic theory based in my knowledge of MAIE, but rather to recognise the complexity and uniqueness of the culture in the construction of MAIE "local knowledge" (Geertz, ibid.).

What I have done, then, is to produce a local narrative – built upon multiple narratives and thick descriptions of the organisational "reality" – that presents MAIE safety through the lenses of my perceptions of organisational members' safety sensemaking. Thus, I have developed what Geertz (1993a) calls "the understanding of understanding": "... a number of actual interpretations of something, anthropologizing formulations of what I take to be some of the broader implications of those interpretations ...." (ibid., 5). It is through these interpretations and implications that the MAIE safety pluralism comes into full view and my version of MAIE local knowledge is established.

8.3. Sensemaking processes.

In numerous examples related to MAIE safety, I have shown how organisational members attribute meaning to organisational events (Weick 1995) and how their multiple safety performances create their subjective safety realities (Mangham and Overington 1987). Chapter 5 – The Formal Structure of MAIE Safety Work – is based upon a diversity of sensemaking processes, depicting both consensus, differentiation and ambiguity in a multitude of safety related situations. In organisational actors' interpretations of the MAIE social reality, their subjective safety cognitions and enactments are just as rational, logical and significant as are

the organisation's official interpretations (Donald and Canter 1993; Leidner 1993; Morgan 1990; Geertz 1973, quoted in Weick 1979). They are based in work experience and competence and thus incorporate much safety knowledge and potential learning (Douglas 1992; Blumer 1986). A significant trait of the MAIE frontstage (Goffman 1959) safety culture, however, is that diverse safety interpretations are not acknowledged as being of safety importance. To the contrary, the plurality and unshared meaning constructs (Weick 1995) of MAIE safety sensemaking are considered incompatible with the espoused and shared MAIE frontstage safety culture, and are thus ordinarily to be found only in backstage arenas where they cannot interfere with the frontstage culture.

A characteristic trait of the diversity and plurality of MAIE safety sensemaking processes is ambiguity and frequent changes also within individuals' interpretations of safety events. Safety constructs vary as new situations arise in which prior interpretations do not seem to fit in any longer (Isabella 1990). Also, organisational members may have more than one interpretation of the same safety situation (Fiol 1996), the interpretations being enacted under differing organisational circumstances. It can thus be stated that fluidity is a significant feature of the MAIE safety sensemaking processes.

That meaning is imparted through identity creating sensemaking processes which motivate and resolve organisational concerns (Pettigrew 1979) has been discussed in chapter 4. It is also suggested that safety issues becomes a binding force in the sustainment of MAIE as a unified organisation. In this context, Reed's (1992) suggestions about the potential of sensemaking processes to sustain or transform an organisation have to be considered. I have argued that the transformative elements of MAIE organisational actors' sensemaking are kept separated from the organisational frontstage, and that this spatial separation is imperative in order to keep up the espoused frontstage culture and organisational unity (Schön 1991). The diversity of MAIE individuals' safety sensemaking is thus "tamed" and regulated into different organisational spheres. In this way, the MAIE multiple safety interpretations' potential for organisational transformation become limited. I follow Weick (1995) in his distinction of shared experience/unshared meaning as I suggest

that the MAIE frontstage is distinguished by shared – identical – experience/unshared meaning situations. But contrary to avoid summarising – sharing out – the shared experiences in fear of focusing upon unshared meaning constructs (Weick, ibid.), what is vocalised at MAIE frontstage is an espoused collective sensemaking process in which shared experience, unity and coherence are emphasised. Backstage, though, the unshared meaning constructs legitimately surface.

I have argued that the existing equilibrium between the two MAIE safety arenas is dependent upon an overall organisational situation which generally speaking is acceptable for organisational members. Without an interpretation of MAIE as an "OK" place to work, the equilibrium can easily be damaged, as has been exemplified in short periods due to specific organisational circumstances. With the equilibrium being out of balance for a longer period, it is reasonable to assume that the diversity of actors' sensemaking processes would reach frontstage arenas and its potential as a transformative force (Reed 1992) would surface.

Another way of analysing the MAIE safety sensemaking process is through the concept of cognitive schemas (Harris 1996; Isabella 1990; Stubbart and Ramaprasad 1990). The formal safety structure's language of safety categories and concepts constitutes the mental map – the schema – through which MAIE organisational members interpret and categorise safety events front stage. When MAIE managers and employees consider safety issues, their shared frame of reference is this language (Schein 1992).

But it is evident that there exists different cognitive safety schemas and different safety languages among MAIE organisational members, and it is similarly evident that the different schemas and languages become operationalised in different organisational situations. What becomes a question of importance is whether the MAIE safety sensemaking process can be characterised as one in which unified organisational diversity (Fiol 1996) exists. Is there at MAIE a shared framework of safety thought – a schema – which is broad enough to encompass the cited differences in safety cognitions? Does there exist a set of core beliefs around which

there openly can be found variations in perceptions of many issues (Porac et al. 1989)? In other words: Is the espoused MAIE frontstage safety schema broad enough to allow inputs from the other MAIE safety schemas while still keeping up its function as a unifying and identity creating force?

MAIE organisational unity is focussed around frontstage safety issues while a great safety diversity has been shown to exist in backstage arenas. But in spite of this, it is difficult to argue that a unified organisational diversity characterises MAIE. If such a unified diversity existed, it is reasonable to suggest that the diversity – and not only the unity – would have been allowed to surface in frontstage situations. I have repeatedly shown that this is not the case. The consequences of the existing partition is that organisational unity becomes a distinguished MAIE trait, while organisational diversity is hard to find without probing into the back quarters of the organisation. Diverse MAIE sensemaking processes most definitely do exist – but they are not openly acknowledged.

8.4. Localised and situational sensemaking.

Although officially unrecognised, the diversity in MAIE safety sensemaking is rich. The question has to be asked why this diversity lives and blooms in spite of its unacknowledged organisational position. To answer this, it is necessary to focus upon the organisational circumstances in which the differing safety constructs are developed.

Silverman (1970) argues that organisational meaning constructions are in a constant flux and differ according to how organisational members interpret what is going on around them. MAIE organisational actors have different positions in the organisation, based in their location in the organisational hierarchy as well as their specific work tasks. Their daily interactions with the plant technology, the organisation of work tasks, their shift environment, and other aspects of MAIE work life thus initiate different interpretations of the MAIE safety efforts. Chapter 5 gives numerous examples of this divergence. What can be argued to be found at MAIE is thus a safety construct diversity which is related to differences in

organisational members' daily work situations. Gherardi and Nicolini (2000b) echo this view when emphasising that an organisations's body of safety knowledge produces safety only when this knowledge is put to work in situated work practices, its meaning being interpreted and translated based in local conditions. Safety is thus a competence that is realised in practice (Gherardi and Nicolini 2000a), and it is therefore by necessity localised and situated.

For example, organisational actors' varying interpretations of the safety regulations regarding personal protective equipment have been commented on in chapter 5. Leidner (1993) states that people do not follow all rules obediently when they believe their interests are not well served by these rules, and according to Canter (1993), irregular work behaviour is sometimes quite intentional in the way that people know they are acting unsafely but nevertheless do so. Based on MAIE organisational members' own explanations, it seems reasonable to suggest that they at times find the accident potential of their unsafe behaviour to be smaller than the perceived personal benefits of not applying to personal protective equipment regulations. In such circumstances, their own situational sensemaking is considered a better behavioural guide than an automatic adherence to the rules of the official safety organisation. When this is the case, they act "unsafely" seen from the MAIE frontstage point of view.

In order to understand people's organisational interpretations and their subsequent actions, it becomes essential to acknowledge organisational members' subjective and situational sensemaking. I have built my research around the subjective rationalities of MAIE organisational members. This choice of mine has made me appreciate that MAIE safety interpretations and enactments can be productively comprehended only when work situations and organisational positions/locations are taken into account (Wright 1994; Czarniawska-Joerges 1993). Safety can be viewed as situated practice which is shaped in social and collective processes of interpretations and translations (Gherardi and Nicolini 2000b) and where safety knowledge is transmitted and stored within communities of practice (Gherardi et al. 1998b).

DeJoy (1994) discusses what he calls the pervasive tendency among managers and safety specialists to underestimate situational factors when they observe and evaluate safety events. As I have repeatedly shown, a plural and situational organisational safety reality is not acknowledged by MAIE management, their position thus being in line with DeJoy's argument. Consequently, much safety sensemaking is channeled into arenas where it is considered legitimate in spite of official rejection. My suggestion that safety sensemaking by necessity is localised and situational explains why a safety diversity continues to flourish – and will continue to flourish – at MAIE. It is an impossibility that MAIE safety interpretations are not diverse due to their origin in different organisational circumstances.

8.5. Authoritative definitions of the organisational safety reality.

Isabella (1990) states that managers use their interpretations of organisational reality to frame meaning for organisational members. Many other researchers echo such a view regarding the centrality of managers as creators of organisational meaning. If this is accepted as a general assumption, then a main question will be to probe into the mechanisms that make this possible. Gherardi and Nicolini (2000a), Berger and Luckmann (1966) and Brown (1989; quoted in Czarniawska 1997) point to organisational power relations in order to offer an answer.

The need to provide an organisation with a sense of controllability (Czarniawska 1997) prompts managers to promote and defend managerial definitions of organisational reality. According to Pym (1990), they utilise sophisticated management and information systems to create acceptance for these definitions. At MAIE, managerial interpretations of the organisational safety reality emerge perpetually and stringently through the formal structure of MAIE safety. This streamlined and bureaucratically designed safety management system is constructed and implemented by MAIE managers with the support of corporate management. It is similar to many models of work accident prevention (e.g. Krause et al. 1990) in which rational action and thought and standardised conditions of knowledge production (Harvey 1992) are core issues. The formal safety structure illuminates

and manifests the way MAIE managers think about safety and safety improvements, and employees often refer to the system as being "owned" by their managers, although employees participate in the system activities on a broad scale. This system of safety work thus acts as a main agent to promote managerially defined safety definitions in order to create and keep up a shared acceptance of the MAIE safety reality (Pym 1990).

By frequent involvement in safety system elements, MAIE employees become socialised into the managerially defined frontstage safety reality. As I have shown previously, they do this to such an extent that they incorporate the MAIE frontstage safety culture as one of their interpretative schemas and also base their shared organisational identity in it. Through this schema, organisational members are made aware of the boundaries for "proper" MAIE safety definitions and consequently which definitions that have the chance of becoming accepted as authoritative. Those definitions that are not coherent with the dominant safety world view represent threats to the espoused unity of the culture (Schön 1991; Argyris and Schön 1978) and become frontstage taboos. MAIE backstage cultures and identities are largely based on safety interpretations that are incompatible with the managerially promoted safety definitions of the MAIE frontstage.

MAIE management has for many years been active in maintenance and improvement of MAIE safety work. Their frequently vocalised good intentions of improved safety is generally taken for face value, and plant history shows many vital safety improvements that have been initiated by managerial efforts. MAIE safety records also indicate safety competence and success. Thus, MAIE management's reputation as safety "winners" – both internally and externally – carries with it prestige and safety acknowledgment. This perceived safety prominence can be seen as a vital tool in MAIE management's efforts to convince organisational members that safety issues "are" the way they are managerially labelled (Czarniawska-Joerges and Joerges 1992). MAIE managers are to a great extent able to achieve meaning authority in the MAIE frontstage safety culture, and this defining power of theirs can be suggested to be closely connected to their generally perceived safety competence.

8.6. Authoritative and non-authoritative safety definitions.

The fate of the non-authoritative MAIE safety definitions is to become backstage phenomena (Goffman 1959). Here, a polyphony of safety definitions exist which are not organisationally acknowledged and can normally not be evidenced as part of the MAIE frontstage safety culture. This multiplicity of safety voices has been an important reservoir for me in my attempt to catch the complexity of MAIE safety. Without such a backstage perspective, a MAIE safety analysis would have turned out very differently.

I have deliberately searched for non-authoritative safe constructs. This approach has enabled me to include safety sensemaking processes that would have been lacking in an analysis built upon the MAIE espoused safety world only. By utilising both authoritative and non-authoritative definitions of the MAIE safety reality, I have tried to avoid forcing MAIE organisational life into commonly used pre-conceived analytical categories that according to Reed (1993) and Linstead (1996) very often are governed by a world view of unity, rational order and integration while refusing to be open to organisational elements that do not "fit" into the "proper" framework of thought. The MAIE non-authoritative safety definitions have made me acknowledge multiple interpretations and social constructions of the MAIE safety reality – a research focus that according to Brooks (1997) is where the only "truths" of organisational life can be found. Even if not following Brooks in his belief in organisational "truths", I find it plausible to state that this perspective of mine has brought both richness, multiplicity and comprehension to my work. It has resulted in an analysis filled with complexity and organisational paradoxes (Czarniawska 1997) in which simultaneously contradictory and ambiguous safety perceptions (Doray 1988; quoted in Brown 1992) have been accepted as organisational "truths" alongside with the shared and espoused interpretations of MAIE safety.

Based on this theoretical approach of mine, I have not produced any "grand narrative" of the MAIE safety reality. My objective in illuminating the vast amount of local and differentiated MAIE safety knowledge (Geertz 1993) has been to offer

insight into a complex safety world rather than to give clear-cut answers (Brooks 1997) to essentially intricate organisational questions. Thus, the approach in itself becomes an aspect of my "local knowledge" constructions: My focus upon authoritative as well as non-authoritative safety constructs has proved to be productive for insight in and comprehension of the localised and situational MAIE safety reality.

8.7. Safety self-perception and safety identity.

Through their sensemaking processes, MAIE organisational members mould their individual and organisational safety self-perceptions. These perceptions are grounded in historical accounts of safety success and safety competence in combination with pride over present safety accomplishments. In my analysis, I have shown how MAIE organisational members share a construct of being a first-class safety organisation in which safety is emphasised and given priority under all organisational circumstances. In their view, MAIE is a distinguished safety organisation, and this perceived state of safety affairs sets MAIE apart from other organisations and is a source of high self-esteem and organisational pride.

The MAIE shared self-perception includes a tale of self-respect, efficiency and autonomy (Czarniawska 1997) as well as it imparts meaning and prescribe how to solve organisational concerns (Pettigrew 1979) – all vital elements in the creation and sustainment of organisational identity. I have argued that a shared MAIE frontstage safety identity emerges from this self-perception. But I have also argued the existence of backstage safety identities, thus evidencing identity multiplicity and complexity (Gherardi and Nicolini 2000; Leidner 1993; Marcus 1992; Gergen 1991). Normally, though, this identity plurality is kept away from organisational frontstage situations.

The shared frontstage safety identity of safety success is shown to have a very prominent place in the MAIE organisational world in general. Based on the seeming lack of other identity promoting organisational themes, I have suggested that the MAIE frontstage safety identity constitutes the basic building bricks of

MAIE's organisational identity in general, and that the shared frontstage safety identity thus produces a collective framework of thought that promotes unity and consensus. The MAIE frontstage safety identity becomes a binding force of the organisation as a whole.

8.8. Safety ideology.

Starbuck and Milliken (quoted in Weick 1995) state that values and beliefs are important filters for people in their sensemaking processes. An espoused unity of safety ideology is frequently voiced at MAIE. In chapter 6, however, I have shown that MAIE organisational members both agree and differ in their basic safety values and beliefs. A main reason for these divergences is said to be caused by difference of perspectives due to dissimilar positions in the production process.

These MAIE ideological assumptions include shared as well as differentiated perceptions of what safety is all about, of who is primarily responsible for worker safety, of the relationship between production and safety issues and whether all accidents and injuries can be prevented. Both shared, group-based and individual ideological filters will influence organisational actors' sensemaking processes, and the simultaneously existing unity and diversity in safety ideology can be looked upon as vital elements in the unceasing interaction between unity, differentiation and ambiguity in MAIE safety sensemaking. It seems rather unthinkable that the MAIE safety sensemaking processes would not be influenced by organisational members' assumptions – shared and differentiated – concerning fundamental safety issues.

8.9. Safety as cultural phenomena.

When analysing MAIE safety, I have utilised different cultural perspectives to illuminate the diversity as well as the unity of the safety culture. The analytical perspective of cultural integration (Trice and Beyer 1993; Martin 1992; Deal and Kennedy 1984) has helped me recognise the unity of the MAIE frontstage safety culture, while the differentiation perspective (Martin 1992; Frost et al. 1991) has

been important for my discovery of the MAIE backstage subcultural definitions of the organisational safety reality. And finally, a cultural fragmentation perspective (Martin 1992; Frost et al. 1991; Martin and Meyerson 1988) with its emphasis on doubt, fluctuation, multiplicity and ambiguity has provided me with an analytical tool with which to capture organisational members' often fluctuating and ambiguous safety interpretations.

Martin's (1992) discussion of the three perspectives on organisational culture has been an eye-opener for me in its argumentation that all perspectives may simultaneously be fruitfully utilised in a cultural analysis of any specific organisation. This analytical approach has helped me to appreciate that the MAIE safety culture at the same time can be viewed as a shared, a differentiated and a fragmented culture (Martin, ibid.). Due to this conceptual framework, I have discovered that the MAIE safety culture is far more complex than the shared frontstage safety culture that easily catches the eye. Backstage, I have found a flourishing multitude of safety interpretations, and I have found cultural differentiation and ambiguity here as opposed to the frontstage cultural simplicity.

The categorisation of the MAIE safety culture as a three-dimensional culture has been one important step in my analysis. Another one was reached as I found that the different cultures coexist and that the majority of MAIE organisational members participate in multicultural enactments due to their specific situational circumstances. The organisational dynamics that in this way is captured in my analysis is thus yet another result of a three-dimensional cultural approach (Martin, ibid.).

The essential question which next arises is how MAIE organisational order can be maintained in spite of the dynamics of the cultural plurality. My analysis shows that organisational stability is dependent upon a clear separation of front- and backstage cultural enactments. This is something that also is commented upon by Gherardi and Nicolini (2000a) when they argue that organisational stability may be threatened by a change of balance in the organisational knowledge situation.

The centrality of the MAIE frontstage safety culture as a unifying organisational element makes it necessary that its main assumptions remain undisputed so that consensus is sustained (Schön 1991; Goffman 1959). The development of separate backstage arenas is argued to maintain MAIE safety unity in spite of a multiplicity of differentiated and ambiguous safety constructs: Backstage, organisational members can promote their "deviant" interpretations which normally are kept away from frontstage situations as a blur between the shared frontstage culture and the many backstage safety cultural enactments could have potentially ruinous effects for MAIE as an organisation. Under ordinary circumstances, the different MAIE safety cultures lead a peaceful coexistence as they are being enacted in their "designated" organisational situations. When circumstances occur in which this equilibrium is threatened, however, the fragile balance of the cultural system becomes apparent, and internal negotiations (Reed 1992; Morgan 1990) become necessary to restore the cultural order. Thus, the safety culture of the MAIE frontstage is kept intact and can play its role for unity and organisational sustainment.

8.10. A safety learning organisation.

I have argued MAIE to be an organisation where the organisational identity is built around the self-perception of being an excellent safety organisation, and I have shown how this is made possible due to the MAIE separation between front- and backstage communities. What is thus promoted is a unitary organisation where consensus reigns in spite of internal safety differentiation and fragmentation.

Continuous safety learning is an espoused MAIE value, and the formal safety structure incorporates many events in which safety learning is emphasised. However, based on my data, I have raised doubts as to whether the safety learning potential of MAIE becomes fully utilised due to the organisational need to shield the MAIE frontstage from safety evaluations that collide with the officially espoused ones.

The organisational safety learning that is intended to take place is supposed to be based in the formal safety system's feed-back routines along with managerial safety information to employees. To a large degree, this frontstage learning strategy seems to function as a learning situation which is dominated by managerial definitions of MAIE safety. It can be argued that the MAIE formal safety learning process focusses upon adherence to the regulations of the formal safety structure and that a persistent rules compliance is a main objective of organisational learning (Gherardi and Nicolini 2000a). With an apparent belief in learning as a delivery of information from a knowledgable source to a less knowledgable recipient (Eckert 1993; quoted in Gherardi et al. 1998a), the MAIE learning process is distinguished by one-way communication which does not leave much room for safety comments and feedback from lower levels of the organisation. Turner (1992a) argues that such feedback is a prerequisite for safety improvement and learning.

According to Czarniawska-Joerges (1993), Wright (1994) and Garfinkel (1967), a mundane work-based focus is vital in order to comprehend organisational actors' meaning constructions. As I have shown in chapter 5, MAIE employees' backstage safety constructs are based in situational definitions of daily safety and a work-based evaluation of the implementation of the MAIE formal safety structure. These backstage safety perceptions may be concerned with issues such as the reasons for unsafe acts (Glendon and McKenna 1995; Leidner 1993), the adaptation of safety procedures to specific work situations, the perceived lack of feed-back from accidents and dangerous incidents, the reliability problems of safety statistics, the form of shift safety inspections and shift safety meetings, etc. And concurrent with these interpretations, suggestions for safety improvements can frequently be found. Due to the separation of front- and backstages, though, this work-based safety knowledge mainly remains a backstage phenomena and very seldom reaches official consideration and recognition.

The result of this is that much of the MAIE safety learning takes place in secluded arenas, thus involving a limited selection of participants. There is no reason to believe this learning to be ineffective for those who take part, but what is missing in such a context is the organisation-wide learning situation that includes the majority

of organisational members in the learning process. And what is similarly missing is the probability that creative backstage safety suggestions as a rule emerge in the MAIE official frontstage learning processes. In this way, it can be argued that MAIE safety learning suffers from the separation of organisational front- and backstages. What is observed is sub-cultural learning situations which maintain existing sub-cultural differences within the MAIE safety culture (Schein 1992).

The MAIE backstage situated and localised safety knowledge – the situated curriculums (Gherardi et al. 1998a) – is varied and complex as it verbalises unshared meaning constructs (Weick 1995) that ordinarily are not found in MAIE frontstage settings. I have shown how this reservoire of safety knowledge is kept backstage and not utilised in the safety learning process, and I have raised the question whether such a strategy is a necessity in order to "protect" the MAIE organisational stability and identity (Gherardi and Nicolini 2000a).

This limited utilisation of the potential for safety learning may be an organisational cost of the espoused and shared MAIE frontstage safety culture. It can be suggested that if safety learning attempts based in backstage perceptions were allowed to enter the frontstage learning process, the possibilities for "cracks" in the frontstage culture would be rather strong (Schön 1991; Goffman 1963). It might therefore seem logical and rational from a unity point of view to pay the cost of diminished and less creative safety learning in order to maintain the officially shared safety culture of MAIE. Whether it is a rational long-term point of view considering safety improvement is another question.

8.11. What distinguishes MAIE as a safety organisation?

After having summed up what I consider to be my main discoveries of the MAIE local knowledge, I am able to come forward with an organisational image of MAIE which in my conception catches what are the most prominent characteristics of MAIE as a safety organisation. Five issues immediately leap to my mind:

8.11.1. Safety as multiple interpretations.

MAIE safety constructs and MAIE safety enactments include a large variety of interpretations which are based in organisational actors' divergent frames of reference and are closely connected to their organisational positions and work tasks. The officially espoused MAIE safety interpretations constitute only a part of the safety perceptions that exist in the organisation at large.

The multiple safety constructs contain differing interpretations of the formal structure of MAIE safety work as well as its implementation. These interpretations vary from the construct pointing to straightforward instrumentality for safety improvement to perceptions of the formal safety structure as symbolic manifestations of the MAIE safety culture as well as functioning as rituals in order to preserve organisational values and beliefs. Also, organisational members perceive the formal safety structure to have become focussed in its own right and thus may contribute to a distortion of organisational safety improvement.

Differing safety values and beliefs also emerge, and so do different views concerning particular safety issues. The variety of perceptions comprises large amounts of localised and situational safety experience and knowledge.

This multiplicity of safety interpretations is not officially recognised or welcomed as being of significance for MAIE as a safety conscious organisation. To the contrary, the plurality of perceptions is looked upon by MAIE managers as irrelevant or even deviant interpretations which may disturb the institutionalised and "proper" way of handling MAIE safety.

8.11.2. Frontstage and backstage safety.

A significant trait of MAIE safety is the way the varied safety interpretations exist in separate organisational arenas. In MAIE front- and backstage situations, different safety cultures and safety identities are performed, and these are both

shared among a majority of organisational members and are the property of specific groups and individuals only.

Frontstage, the frequently espoused culture and identity are shared among most organisational members. Through this culture and identity consensus, a unified and self-conscious safety organisation stands forward in which safety is focussed in organisational rhetorics, structures and processes. Little if any differentiation or ambiguity in safety interpretations can be evidenced at the MAIE frontstage.
In secluded circumstances at MAIE backstage, though, employees' safety interpretations often differ from those of the organisational frontstage. Here, the espoused MAIE frontstage interpretations are challenged by an abundance of situational and localised safety perceptions, depicting safety theories-in-use that are characterised by differentiation, ambiguity and fluctuation. Unshared meaning constructs regarding shared safety experiences flourish, and the backstage safety plurality contrasts very distinctly to the streamlined unity of the MAIE frontstage. Safety subcultures and multiple safety identities are developed and enacted in the backstage surroundings.

MAIE front- and backstages are separated from each other, thus enabling MAIE employees to participate in both arenas without the simultaneous unity and disunity of safety interpretations causing embarrassment and conflict. When employee backstage perceptions at times appear frontstage, it is usually the result of managerial safety conduct that employees consider to be in opposition to general rules of organisational decency. But such situations are rare, and the distinct separation of front- and backstages constitutes a significant MAIE organisational characteristic.

8.11.3. Safety as a dominant organisational theme.

I have suggested that MAIE's frontstage safety culture emerges as a major organisational schema or frame of reference through which many organisational events are being interpreted and ordered. I have also suggested that organisational members' shared frontstage safety identity stands forward as a dominant part of the

organisational identity. It can furthermore be argued that there exists a state of mutual reinforcement between the frontstage safety culture and the frontstage safety identity as each of them inevitably works to strengthen the other.

In this way, safety issues can be looked upon as having additional organisational significance than safety promotion only as safety becomes a main issue around which MAIE is ordered and unified and around which organisational pride and recognition is focussed. This situation works perpetually to reinforce even further safety's dominant organisational role.

A prerequisite for the maintenance of this safety dominated organisational order is the existing separation between the MAIE front- and backstages. By means of this partition, threats to the cohesive and unifying agencies of the frontstage identity and culture are prevented. When seen in this perspective, the importance of the separation becomes emphasised as its purpose is seen to be more essential than merely avoiding organisational embarrassment and conflict. What is prevented by the strict partition of organisational front- and backstages is a possible break-down of organisational unity and a loss of organisational identity. Without a state of a generally accepted organisational feeling of unity and order and a common feeling of membership and identity, MAIE as an organisation could easily enter into a position of potential disorganisation and disintegration.

8.11.4. Safety learning and development.

MAIE official safety learning is said to be based in a philosophy of continuous improvement and is supposedly being achieved by the systematic utilisation of organisational members' safety experiences and safety suggestions. Safety learning efforts are formalised in the MAIE safety structure and is claimed to be an integrated part of all formal safety activities.

As I have shown, a multiplicity of safety interpretations exists at MAIE. A question of considerable interest has been to establish whether the full amount of these work related safety experiences and perceptions are being utilised as the basis for MAIE

safety learning, or whether specific interpretations are being preferred at the cost of others.

My analysis has shown that due to the organisational importance of the MAIE frontstage safety unity, the larger part of backstage interpretations does not play any part in the formal organisational learning efforts. Only a fraction of the MAIE plural safety interpretations appears in the MAIE frontstage learning efforts which can be looked upon as a one-way learning process where managerial definitions of MAIE safety are dominant. This situation causes a substantial narrowing of the MAIE basis for safety learning as potentially vitalising elements connected with organisational dissensus and ambiguity do not reach the MAIE frontstage learning spheres.

The limited focus of the official safety learning process counteracts the espoused MAIE statements of a systematic utilisation of safety experiences and evaluations in safety learning and development efforts. The vital position of MAIE frontstage safety with its self-perception of being in the safety forefront thus can be suggested to function as a barrier for safety learning and to have unintended – and unacknowledged – consequences for MAIE safety development.

8.11.5. A "strong" safety culture.

MAIE is an organisation where safety is an issue of importance, both in the daily work tasks and as a main cohesive and identity building factor. Seen in this perspective, MAIE can be characterised as an organisation with a distinguished and "strong" safety culture which influences organisational activities on a broad scale. It is tempting to argue that MAIE "is" its frontstage safety culture.

This situation is beneficial for the keeping of a continuous safety focus. MAIE worker safety has improved through the years, much due to safety's central organisational position, and safety development work is continually being undertaken. At MAIE, it is not possible to ignore obvious safety challenges without running the risk of harming the organisational image and the identity building

culture. Thus, organisational members find invaluable support for improved safety efforts in the MAIE organisational culture – provided they keep themselves within the boundaries of the epoused and shared frontstage culture.

But other organisational consequences of a "strong" safety culture can also be seen. In spite of the positive self-evaluation of safety success, many MAIE organisational members – managers and employees alike – state that MAIE safety work is not overly creative and that new approaches are difficult to come up with. The bureaucratic stability of the MAIE safety thinking and doing accounts for a lack of new initiatives, it is said. A way of mending this situation could be to open up for the many backstage safety interpretations and look for new angles of safety approaches in this reservoir of safety knowledge. But up till now, this has not been a management strategy, and I will argue that this choice can be looked upon as a result of MAIE's "strong" safety culture.

The frontstage exclusion of backstage perceptions has been a recurring theme in my analysis. A question of importance is whether this situation is an inevitable effect of the safety culture's dominance in organisational affairs. It is my suggestion that there exists a connection between the "strength" of the MAIE safety culture and the seeming necessity to keep backstage perceptions hidden from public view. This can be argued to be the case because of the image of consensus and unity that the "strong" MAIE culture presents as its trademark. It can also be assumed that the more the consensus image is emphasised, the more necessary it becomes to shield the espoused frontstage culture from "deviant" interpretations (Goffman 1963). At MAIE, organisational identity is based in this culture – a situation which further strengthens the necessity to keep the culture "clean".

As a result, backstage interpretations are not acknowledged in the espoused MAIE safety culture, and organisational safety learning suffers from this state of affairs. It becomes an organisational paradox that the "strong" MAIE safety culture can be argued to be a barrier for safety learning and improvement. This analysis is in total discord with the way that MAIE portrays itself as a learning safety organisation. But it supports Gherardi et al.'s (1998b:211) conclusion that "strong" organisational

cultures may compromise safety as they stress social control over individuals and organisational units.

8.12. Will any "recommendations" for safety or safety research originate from my findings?

It is time to ask whether this study has illuminated issues that are worthy of further attention concerning practical safety issues or future safety research. Has this work of mine contributed to the enlargement of the body of safety knowledge in a way that potentially can bring on safety improvements and lead to theoretical developments within the field of safety research?

The aim of this study has been to develop local knowledge, and I have utilised thick descriptions of the MAIE multiple organisational safety reality in order to take my audience and myself through the processes of research sensemaking and the establishment of local knowledge. But even though a goal of mine has been to avoid generalisations, I will propose tentative answers to the stated questions which are based in the local MAIE knowledge I have come up with and methodological and other experiences I have gained in the course of this research project.

But first of all I will turn my attention to MAIE in order to spell out my "recommendations" for this specific organisation based in my local knowledge of the plant.

8.12.1. MAIE and further safety development – or why it is imperative to understand MAIE from different angles.

The most obvious beneficiary of this work is the organisation I have chosen to study – provided there exists an interest at MAIE to spend time on an outsider's view of the organisation. Through my work, MAIE organisational members will have the chance to get an extensive insight into their own organisation and safety culture. Whether or not MAIE will appreciate and take any notice of my study in their

continued safety work is a question I will not speculate about. But the potential for this to take place is present.

Managerial ability to manage and develop an organisation is dependent upon thorough knowledge about the organisation in question. MAIE managers know their organisation and their employees from many years of coexistence, and there is no reason to believe their organisational knowledge to be lacking when compared to organisations in general. Rather, it seems reasonable to suggest that MAIE managerial knowledge can be assumed to be quite extensive, due to the modest size of the plant and the informal organisational atmosphere.

MAIE managers repeatedly claim they have a comprehensive overview of the MAIE safety situation, and that accordingly, they know what actions to take for the further development of MAIE as a safe place to work. It has been difficult for me to establish precisely to what extent the MAIE backstage safety interpretations are known to MAIE managers. Irrespective of whether or not they are partially or even fully aware of the existing multiplicity of safety constructs, though, it can be seen that they do not observe this variety of constructs in their safety development efforts as MAIE safety work is built upon managerial and shared frontstage safety interpretations.

The MAIE consensus hegemony works as a barrier for the acknowledgment of the positive aspects of the MAIE organisational heterogeneity. It can be argued that MAIE managers' repertoire for managing safety in a creative and innovative manner would expand if they encouraged backstage definitions to come forward and acknowledged these as valuable assets in their work for improved worker safety. Such an approach – the recognition of plural safety cultures – would enhance the probability for developing a comprehensive understanding of MAIE as an organisation – albeit a complex one as compared to the rather streamlined and unified picture that MAIE managers today construct their safety policies around. It cannot be considered too fanciful a speculation that the possibilities for new and productive safety initiatives lie inherent in a widening of the scope of safety knowledge to include differing perspectives.

But – as I have discussed previously – such an inclusive managerial strategy is probably not possible without organisational alterations. By the "opening up" of the organisation in order to include ambiguous interpretations, it can easily be imagined that the shared frontstage safety culture and identity would become disrupted and cause organisational destabilisation. Such a situation is likely to bring about unintended organisational consequences as the present pattern of organisational authority becomes altered.

The question is whether it would be possible to combine the organising benefits of the shared safety identity and safety culture of today's MAIE with a more open and inclusive approach towards multiple safety interpretations. This would require major changes in organisational attitudes of what is the accepted range of safety "truths". Following this, a safety philosophy has to be developed in which the advantages and empowering strengths of a safety culture that is built upon diversity and multiplicity is emphasised. And finally, a multiple perspective has to be promoted as the shared and identifying image of MAIE safety instead of the presently focussed unambiguous state of the frontstage safety culture. If this became the case, MAIE's safety culture could be described as one in which unified organisational diversity is a distinguishing cultural trait.

Such a project includes nothing less than a major change in the MAIE culture and is a very demanding task even if the will to attempt the change is present. When considering the importance of MAIE managers in the construction of organisational safety meaning through their authoritative labelling, the managers would necessarily have to play an active role in such a transformation of the MAIE cultural reality. There is no indication that MAIE managers contemplate or see the need for a change process like this. And from my position, it can never be anything else than pure speculations whether a transformation like the described one would be possible in the specific organisational circumstances of MAIE. But for the sake of improved safety, it is my firm belief that it would be worth the attempt.

8.12.2. My research and a general focus on "good" safety cultures.

Frequently, it can be heard or read that what is needed for organisational safety improvement is to change and improve an organisation's safety culture – and then safety problems will become easier to solve or almost cease to exist. In the first pages of this thesis, I spelled out how a main source of inspiration for this research work was what I felt to be a simultaneously tool-oriented, fuzzy and almost magical utilisation of the concept of "safety culture". I said that I wanted to fill the concept with substance rather than with what I experienced as thin and mostly rhetorical air. Since I started this work, work accidents and disasters have continued to take place, both locally, nationally and on an international level. In my mind, the evening of November 26, 1999 holds a specific position. This was the night when the fastgoing passenger vessel "Sleipner" sank – close to my shores – after having hit an underwater rock en route from Stavanger to Bergen on the western coast of Norway, resulting in the loss of 16 lives. Among those who lost their lives were people from my local community.

In the aftermath of this catastrophe a multitude of safety-related questions have been raised and numerous speculations have been offered why the "unthinkable" actually happened: Technical problems, navigation mistakes, construction defaults, improper training, bad weather conditions, insufficient lights to mark the underwater rock, low quality safety vests, nonusable rafts, incompetent behaviour from the ship's crew – and allegations of the poor state of the ship company's "safety culture". An improvement of this culture was said to be a main objective in order to prevent such a disaster ever to happen again.

As far as I was able to understand this "safety culture" improvement perspective as it came forward in the extensive media coverage that followed the accident, it was focussed around the development and implementation of new and better company procedures for the handling of ship safety and – in my mind – the almost mythical and rapid improvement of the ship company's safety culture. The vital question of *how* to improve the safety culture was not touched upon – as usual. Not a word about the organisational options to reach down into the lower levels of the

organisation in question – to its backstages and doubtlessly existing polyphony of safety voices – in order to grasp and utilise the localised and situated safety knowledge there for safety culture improvement came to the surface as an objective of any interest. The belief in a rational, procedural and mythical safety cultural development still seems to be well and alive.

In the wake of the "Sleipner" disaster, some local ship companies' backstages have come to public attention by way of crew members' media appearances through which insufficient safety precautions have been illuminated and suggestions for improvements have been pointed to. Whether there has been a will or not inside these companies to include these crew perceptions as legitimate safety constructs lies outside the scope of my knowledge. I can only guess that, since organisational members have chosen to utilise media as their channel of communication, they might have found it difficult to get their definitions accepted internally. What these media-revealed safety constructs have shown a little glimpse of, though, is the stock of vital situated safety knowledge that can be found in close proximity to mundane and daily work chores.

A further "search" for a "good" safety culture in my view must build upon the many and complex safety perceptions that are bound to be found in any organisation. As it incorporates safety knowledge that is developed in the daily work process, such a perspective on safety improvement and learning will cultivate a company safety culture that blends safety procedures and regulations with "bottom-up" feedback in a cultural mix that has the potential of becoming a productive and innovative – although complex and not easily managed – safety culture which is "owned" by all organisational members. If managers in addition are aware of and capable of the utilisation of symbolic leadership as one of the means of building and strengthening such a collective although complex culture, then the chances of developing a "good" safety culture might be present.

It is a managerial task of no small measure, though, to promote and sustain an organisational culture in which a genuine interest in organisational actors' safety perceptions lies at the core of safety development. In such a setting, managers will

have to abandon the traditionally dominant position of their own safety constructs in favour of a philosophy in which all perceptions – regardless of their origin in the organisational hierarchy – is considered of equal value.

These safety improvement suggestions of mine will probably be incompatible with the general distribution of power in most organisations. Whether a wish for improved worker safety is a strong enough managerial incentive to be allowed to interfere with organisational power relations is a question of no small importance. In spite of all legitimate doubts that can be mustered to contradict the possibilities of a managerial "resignation" of their defining authorities concerning safety, I choose to believe that if the wish for improved safety is a genuine managerial aim, then managers will dare to let their definition supremacy go.

With this optimistic background setting, my general "recommendations" turn out to be quite similar to the ones I proposed for MAIE: It seems to me that it is only by a truthful organisational effort to include both differentiated and ambiguous safety perceptions from all levels of the organisation that a company is able to develop a genuinely "good" safety culture which is filled with more substance than bureaucratic procedures and thin rhetorical air only. This task involves the acknowledgment of organisational backstage knowledge as well as developing procedures to bring this knowledge into the open in order to utilise a multiplicity of safety definitions in the organisational learning process. Such an effort is not a particularly small job. But it may be a worthwhile organisational strategy for the improvement of organisational safety learning – and for minimising the probability of new "Sleipner" events.

8.12.3. The significance of my study within the field of safety research.

Finally, it is time to establish – at least in my own mind – the significance of this research project of mine and the "results" I have come up with in the context of safety research in general and as a possible contribution to the further development

of this field of research. Have essential new insights and issues that are worthy of further considerations emerged from my work?

When citing the purpose of my study, I said that my intention was to do an exploratory study of worker safety which focussed around organisational actors' own perceptions and sensemaking of their safety reality. I also established that it was a goal of mine to utilise my chosen theoretical framework in order to illuminate issues concerning safety and safety organising that infrequently are being considered in safety research literature. And finally, I emphasised that my purpose was to produce local knowledge and not generic theory since I do not believe that it is possible to come up with "the essence" of safety and safety development in general based in any localised safety study. But even so, I could hope that my chosen approach would prove beneficial for the development of new aspects of safety knowledge and improvement of worker safety in general.

In order to gain insight into my chosen research objectives, I spent three fieldwork periods at my chosen place of study. In the course of this time, I observed, I participated in the work process, I attended shift safety inspections, shift safety meetings and a local safety conference, I read offical safety documents, I participated in the daily life of the plant in all imaginable ways and I was also given access to employee backstage regions. And I interviewed organisational actors: nine managers and 92 production employees sat down with me for talks about safety and their interpretations of the MAIE safety reality. My main goal was to collect safety perceptions and safety knowledge from all these sources in order to be able to analyse the MAIE safety culture from all possible angles.

I will argue that I have reached my objective of doing a study like the one I intended to do. My completed thesis hopefully evidences this statement of mine. It has been a long and at times strenous journey to try my best to be true to the theoretical and methodological choices I made – choices that kept sitting in my spine throughout all phases of this work. To base an organisational study in an approach which emphasises mundanity and multiple perspectives and utilises

ethnography as a methodology to grasp these perspectives is not any easy way of doing a study. Lack of time, waning persistence and the feeling of being overwhelmed by the abundant data material has been major obstacles to combat during my long-lasting research odyssey. But in retrospect I am convinced that I in fact did not have much choice regarding theoretical perspectives or methodology if I wanted to "do a safety analysis which focusses around organisational actors' own perceptions of their safety reality" as I spelled out to be the purpose of my study on p. 13 in this thesis.

It has been necessary to abandon research perspectives which look upon work safety as a result of what is considered rational, logical and management-based problem solving methods and systems. Rather, it has been vital for me to investigate the MAIE safety culture within a broad perspective since part of my theoretical luggage throughout this research venture has been a scepticism to what I perceive as superficial and instrumental approaches to organisational culture in some research traditions. A multiperspective paradigm has been my overall guide in my effort to focus upon the subjetive safety sensemaking processes of MAIE organisational actors, and as a result of this paradigmatic choice, I have been able to "catch" the multiplicity and complexity of organisational voices in a way that a more "rationally" based safety research approach doubtfully would have been able to achieve. The "ant heap" perspective (Geertz 1993a) has shown to be productive in the illumination of local MAIE safety culture knowledge.

In order to come to grips with this local knowledge, it has furthermore been necessary to abandon methodological tools that would not enable me to illuminate different levels and aspects of the safety culture I wanted to study. An ethnographic method of research seemed to me to be exempt from methodological competition as my research objective was to explore into the polyphony of an organisation without the "help" of pre-conceived research categories. "To be an ethnographer" thus became an inevitable methodological decision due to ethnography's all-embracing and exploring research approach, and I have found my choice of methodology as well as my preferred theoretical perspectives to be highly profitable in order to analyse safety as complex, fragmented and ambiguous organisational processes.

As a result of my research findings which are based in these cited choices of mine, it has been necessary for me to write an ethnographic tale about MAIE which focusses upon the multiple and mundane affairs of MAIE safety, consisting of thick descriptions (Geertz 1993b) of the organisational sensemaking processes. My work is thus an "answer" to what I consider to be an oversimplification of the dynamics of organisatonal culture in general: The notion that it is a somewhat straightforward and instrumental task to create, to change and to analyse an organisational culture – as is not seldom implied in culture literature – has to me never seemed to be in accordance with organisational reality. My research work has fully made me realise the point made by Bate (1994) when he talks about cultural matters and argues that one never seems to get to the bottom of things. "The greater the island of knowledge grows, the greater becomes the shoreline of the unknown" says Wheeler (1980: quoted in Bate 1994:4). I have not reached to the bottom of the MAIE safety culture, and I can clearly see the shoreline of the unknown. But even so, I am confident that my approach has taken me further down the road of cultural comprehension and found more turtles (Geertz 1993b) than a more instrumental cultural approach would have been able to.

My research has shown that MAIE's safety culture has emerged as the result of organisational processes over a long period of time. I have also shown that the safety culture is complex, comprising different safety cultures and a multitude of differentiated, ambiguous and fluctuating safety perspectives in spite of being portrayed as homogeneous and streamlined. In order to comprehend the MAIE safety culture, it has been vital to include all these different cultural aspects into my analysis. Without such an approach, I could easily have ended up with an analysis that overlooked imperative elements in the dynamic life of the MAIE safety culture.

Thus, a call for methodological and paradigmatic consensus in organisation studies scares me, as is promoted for instance by Pfeffer (1995). He argues that in order to acquire a position "in the marketplace of ideas" (p. 684), organisation researchers should strive towards a consensus on approaches, ideas, and perhaps most importantly, methods. Pfeffer argues that what he perceives as a laissez-faire and let-a-thousand-flowers-bloom spirit currently pervades organisation studies (p.

685), and this multitude of perspectives bears the cost of a lessened influence for the field as a whole in the world of research.

I am not overly concerned about my work's position "in the marketplace of ideas", but I *am* concerned that a methodological and paradigmatic multiplicity in organisational studies – and specifically safety studies – becomes a norm, and to a greater extent that what I perceive it to be today. Contrary to Pfeffer's suggestions, the field of organisational safety research seems to me to *lack* methodological and paradigmatic diversity.

In his replies to Pfeffer, Van Maanen (1995a; 1995b) argues against the call for a consensus paradigm and characterises the effort as "... the industrialization of scholarship, not its advancement" (1995a, p. 689). Van Maanen uses Karl Weick and the widespread influence of his work in organisational studies as an example of how paradigmatic – and stylistic – diversity has been vital for the development of the field. He praises Weick's ability – as well as courage – to leave interpretations to his readers, and he also emphasises Weick's "dialectic reconstruction" in which opposites are shown to be "true" at the same time (Van Maanen 1995b, p. 137). In this way, Van Maanen argues that Weick is able to"... depict an organizational world that is in continual flux, a world that is always becoming" (ibid., p. 138).

It has been essential for me throughout this work to leave interpretations open in the way that organisational actors' own and multiple interpretations are being presented to my audience in great numbers. In this way, my readers are able to form their own interpretations and conclusions which might or might not coincide with those that I myself have come up with in my discussions of MAIE local theory. I have also frequently shown the MAIE safety reality to be apparently contradictional in the way that organisational members – in different situational settings frontstage and backstage – have multiple and at times oppositional interpretations of the same safety affairs. Thus, an organisation which is based in dialectic dynamics is presented, and I have argued that this diversity and this ambiguity are main traits of MAIE as a safety organisation.

I believe that future safety research can gain insight from my study by giving attention to mundane and multiple safety perceptions. I suspect that a similar safety multiplicity as the one at MAIE can be found in any organisation irrespective of the organisational safety image that is being offered to the outside world. There is little reason to assume that MAIE's safety cultural complexity is unique, and I suspect that a similar safety heterogeneity would be found in many organisatons – if looked for. I am convinced that safety research – and organisations – will benefit from becoming aware of such a complexity and from the simultaneous valuing of authoritative and non-authoritative definitions of the organisational safety reality. If a search for multiple safety perspectives became included in safety culture research and cultural multiplicity became acknowledged as "part of the game", hitherto "hidden" organisational cultures would become visible and much situated and localised safety knowledge would surface. Instead of ignoring them or even denying their existence, an acknowledgment of multiple safety interpretations would broaden the analytical approach and improve the research potential of being able to provide "... knowledge foundations for a comprehensive and perceptive understanding of conditions, situations and mechanisms which influence and can influence actors in organisations" (Alvesson and Berg 1992:177). Such an approach could prevent too narrow a strategy in safety culture research and thus have the potential of enhancing the practical utility of such research.

It is true that safety research in this way would appear less streamlined than it often seems to be at present and that the research results and proposals for actions would become less predictable and appear to be less smooth when it comes to implementation. But when differing aspects of the organisational safety reality is illuminated, then the chances for increased safety learning in general would be improved and practical and applicable safety solutions easier to find. When being based in a comprehensive safety culture approach, change efforts would stand a chance in having substantial effects on the organisational safety situation – which normally is the objective when trying to transform and improve a safety culture.

Pfeffer (1995) states "... that for writing to be influential, it must suggest not only what to do in general terms but how to go about doing it in very specific terms" (p.

685). I do not find this statement to be a sound advice for the further development of organisational safety research. As Van Maanen (1995a; 1995b), I have argued that organisations are not "objective worlds" that can be represented and analysed through an "authoritative" set of methodological and analytical prescriptions and thereafter be presented to an audience by way of clear-cut and general research "results". Pfeffer's (ibid.) certainty and his promotion of a consensual state of affairs in organisational studies is in full contradiction to my point of view. In my opinion, safety research has a strong need for a paradigmatic diversity that encourages multiple perspectives and comes up with fewer non-ambiguous suggestions both in general and specific terms. Only through such a paradigmatic diversity will safety research be able to catch the dynamics of safety in complex organisations.

It is my belief that my research approach thus is my main contribution to the field of safety research. I hope that future research will take on the task to investigate worker safety from many organisational angles and perspectives in order to uncover more and more layers of turtles (Geertz 1993b). Whether this by necessity involves the task of becoming a longitudinal ethnographer is doubtful. There are surely less time-consuming methodologies that can take care of this research objective, although notably in a less thorough manner than a "full-scale" ethnographic approach. It is therefore a challenge for future safety research to come up with methodological and analytical propositions which have the potential to include and focus upon subjective safety rationalities. By a recognition of the mundane, situated and multiple safety knowledge that will come to the surface when looked for, both researchers and practitioners will be able to come up with a work-based and innovative repertoire for theory building and safety improvements that has the potential for strengthening worker safety. And that is what this is all about, my MAIE informants tell me. I hope they are right.

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APPENDICES

1. Standardised form – accidents, damages.
2. Reports – shift safety inspections – five examples.
3. Accident reports – three examples.
4. Monthly summary of accidents – two examples.
5. Monthly safety statistics – three examples.
6. Statistical graph – accidents and H-value.
7. Safety statistics 1993 – 1995.
8. Safety report – accidents and accident causes.
9. Extracts of field diary – four examples.
10. Tapes.

Melding om personskader
Tilløp til ulykke/Materiell skade APPdl

Rapporten skal sendes verneavdelingen innen 24 timer ved personskade, tilløp til ulykke, materiell skade, eller hendelser med materiell skade av verne/sikkerhetsmessig betydning.

Rapporten fylles ut i 5 eksemplarer.

Sendes: 1-hvit Avdelingsleder, 2-grønn Verneavdeling, 3-rød Helseavdeling, 4-gul Egen kopi og 5-blå utførende avdeling v/materiell skade.

Sted og tid

Stedsangivelse

Ukedag | Dato | Kl.

Utfylles ved personskade og materiell skade

Arb. nr. | Navn

Alder | Yrke

Tilhører avd. | Hvor lenge i nåværende arbeid?

Beskjeftigelse i skadeøyeblikket

Hendelses forløp

Beskriv hendelsen. (Bruk om nødvendig baksiden).

Venstre	Høyre	Skadet legemsdel
		Hode
		Hals
		Øyne
		Øre
		Skulder
		Arm
		Hånd
		Fingre
		Bryst
		Mage
		Rygg
		Hofte
		Ben
		Fotlær

Skade

Hvilken skade oppstod?

Verneutstyr

— Manglet — Ikke brukt — Defekt

— Brukt men utilstrekkelig — Uten betydning for skaden — Annet

Øyenvitner

Årsaksforhold

Hva var årsaken til hendelsen?

Tiltak

Hva er/vil bli gjort i avdelingen for å forebygge liknende?

Underskrift

Dato | Arbeidsleder | Dato | Verneombud

For vernetjenesten

Fraværstidsrom F.o.m. – 264 – T.o.m. Fraværsdager

1865 BLE 6 97 2000 • 5

APP. 2.

Verneprotokoll

Vernerunde nr. 4-94

Avdeling	Tid og sted
	16-3-94
Deltakere	
Kopi til	

Sak nr.	Sak-problem-løsning-forslag NB! Brud på verneregler skal påtales på stedet og noteres	Ansvarlig	Frist dato	Utført
4.	Ved eskekapp - rydding av rot		Straks	
5.	Ved Englandstrailere - tau og pressenninger ligger hulter til bulter		25.3.	
6.	Paller i Nord fjernes.		25.3.	
7.	Trelabanker, fjøler eloks. gangvei fjernes.		25.3.	
8.	System for oppheng for belger og jiggeutstyr eloks.		25.3	
9.	Pakkejobbsituasjon. Høydeforskjell ved pakking kan være et problem ved tunge profiler. Det er også vondt å strappe når kolliet blir for høyt. Løftebord til å pakke på ville løst disse problemene. Siste skade m/fravær 8-12-81 Siste tilløp 4-2-94			

APP.2.

Verneprotokoll

Vernerunde nr. 3-94

Avdeling	Tid og sted
	18.03.94
Deltakere	
[redacted]	
Kopi til	

Sak nr.	Sak-problem-løsning-forslag NB! Brud på verneregler skal påtales på stedet og noteres	Ansvarlig	Frist dato	Utført
18	Fjerne reol sør for store herdeovn.		15.04	
19	Mye oljesøl som kommer fra tailstok.		15.04	
20	Mangler lys i nødlys ved enden av utløpsseksjon.		28.03	
21	Rot og oljesøl ved vestsiden av pressen.		28.04	
22	Området bak billetovn og rampe må rengjøres.		15.04	
23	Skrapet backere ved forsøkpresse må fjernes.		28.03	
24	Se på plass for lagring av sprayringer.		15.04	
25	Oljesøl under agregat for strekker.		28.03	
	Sett på sag- og strekk operatørene som utførte arbeidet på en sikker og fin måte. Siste skade u/fravær 9/12-93 Siste skade m/fravær 17/8-87			

APP. 2.

Verneprotokoll

Vernerunde nr. 3-94

Avdeling	Tid og sted
Deltakere	
Kopi til	

Sak nr.	Sak-problem-løsning-forslag NB! Brud på verneregler skal påtales på stedet og noteres	Ansvarlig	Frist dato	Utført
94	Lysrør i mek.verksted.		31.03	
97	Tappeslange for kaustikk.		31.03	
107	Støv og skilt under verktøyringer.		31.03	
108	Luker i "tele-dont" ligger slengt på gulv, må monteres.		31.03	
109	Skraptobber står tilfeldig plassert sør for reoler (H-verktøy) bør oppmerkes egne felt på gulv.		31.03	
110	Lysarmatur ved propanventiler fjernes.		Snart	
111	Brannsl.app. ved inngang verkt.avd. mangler kontroll-lapp.		Snarest	
112	Kroksperre på svingkran i kaustikk er defekt.		Snarest	
113	Løs og skjev rist i "luftegård" kaustikk.			

APP.2.

Verneprotokoll

Vernerunde nr. 4-94

Avdeling	Tid og sted
F	8.4.94
Deltakere	
Kopi til	

Sak nr.	Sak-problem-løsning-forslag NB! Brud på verneregler skal påtales på stedet og noteres	Ansvarlig	Frist dato	Utført
7	Vann i gangbane må fjernes.		Straks	
8	Biler feilparkert i embalasje-område.		Straks	
9	Ny reol for pakkestativ.		1/5	
10	Gammelt skap vestre vegg fjernes.		Straks	
11	Flere stativer for mellomleggsstrør lages.		15/4	
	1 person på vei gjennom pressverket uten hjelm. Saken ble muntelig tatt opp med vedkommende. Personen var ikke ansatt i P.V.			
	Forrige verneprotokoll gjennomgått.			
	Siste skade 1.12.93.			

APP.2

Verneprotokoll

Vernerunde nr.

Avdeling	Tid og sted
Deltakere	
Kopi til	

Sak nr.	Sak-problem-løsning-forslag NB! Brud på verneregler skal påtales på stedet og noteres	Ansvarlig	Frist dato	Utført
94	Lysrør i mek.verkst. ikke utført.		21.04	
114	Ferdig overhalt elektro-motor ligger på gulv i mek.verkst. - må fjernes.		21.04	
115	Dårlig orden på arbeidsbenker i mek.verkst.		30.04	
116	Verktøy-brett står tilfeldig plassert på gulv nord for reoler H-verkt. Skal være plassert i stativ. Stativ bør være plassert nærmere mont.plass.		21.04	
117	Verktøy-brett ramler ut fra baksiden av stativ. Må sikres.		30.04	
118	Elektroskap i verkt.lager henger for høyt på vegg; gardintrapp er aldri på plass. Bør muligens bygge en fast plattform/trapp under skapet.		30.04	

APP. 3.

Hendelsesforløp

Beskriv hendelsen. (Bruk om nødvendig baksiden).

Aluminiumsplater fra gammelt ventilasjonssystem på tak over pakk/eloksering blåste ned på bakken østre side ved eloksering. Noe henger igjenn på taket.
Arbeid pågår på dagtid med ombygging.

	Venstre	Høyre	Skadet legemsdel
			Hode
			Hals
			Øyne
			Øre
			Skulder
			Arm
			Hånd
			Fingre
			Bryst
			Mage
			Rygg
			Hofte
			Ben
			Fot/tær

Skade

Hvilken skade oppstod? Ingen

Verneutstyr

☐ Manglet ☐ Ikke brukt ☐ Defekt
☐ Brukt men utilstrekkelig ☐ Uten betydning for skaden ☒ Annet

Øyenvitner

Årsaksforhold

Hva var årsaken til hendelsen?
Mulig årsak kan være gjennglemte plater etter ombygging av ventilasjon.

Tiltak

Hva er/vil bli gjort i avdelingen for å forebygge likende?
Dekke ble kontaktet, trappen blir sperret av frem til dagslys, for at platene kan tas ned.

Underskrift

2/2-95 — Dato — Arbeidsleder
2/2-95 — Dato — Vernombud

For vernetjenesten

Fraværstidsrom | F.o.m. | T.o.m. | Fraværsdager

Tosa/KT 9.91 2000 x 5

APP. 3.

Hendelsesforløp

Beskriv hendelsen. (Bruk om nødvendig baksiden)

Skims ble funnet på gulv mandag. Ingen var helt klar over hvor de kom fra. Nye skims ble funnet tirsdag kranverksted ble kontaktet og ved inspeksjon ble bolter fil gicr oppdaget

Venstre	Høyre	Skadet legemsdel
		Hode
		Hals
		Øyne
		Øre
		Skulder
		Arm
		Hånd
		Fingre
		Bryst
		Mage
		Rygg
		Hofte
		Ben
		Fot/tær

Skade

Hvilken skade oppstod? Ingen

Verneutstyr

☐ Manglet	☐ Ikke brukt	☐ Defekt
☐ Brukt men utilstrekkelig	☐ Uten betydning for skaden	☒ Annet

Øyenvitner

Årsaksforhold

Hva var årsaken til hendelsen?

Boltene på gicrkasse var løsnet, skimsene løsnet og falt ned

Tiltak

Hva er/vil bli gjort i avdelingen for å forebygge liknende?

Kranverksted kontaktet, de foreslår ukentlig kontroll ved egen vedlikeholdsverd evt. kranv. sted. skjems blir lagt.

Underskrift

8/2-95 — Dato — Arbeidsleder

8/2 95 — Dato — Verneombud

For vernetjenesten

Fraværstidsrom	F.o.m.	T.o.m.	Fraværsdager

1665 KT 8.91 2000 x 5

APP. 3.

Hendelsesforløp

Beskriv hendelsen. (Bruk om nødvendig baksiden).

Under flytting av feste for nedföringer, drysset det ned stöv/skitt som operatören fikk i ansikt/öyne.

Skadet legemsdel	Venstre	Høyre
Hode		
Hals		
Øyne	X	X
Øre		
Skulder		
Arm		
Hånd		
Fingre		
Bryst		
Mage		
Rygg		
Hofte		
Ben		
Fot/tær		

Skade

Hvilken skade oppstod? Rusk i öyne

Verne-utstyr

[X] Manglet	[ ] Ikke brukt	[ ] Defekt
[ ] Brukt men utilstrekkelig	[ ] Uten betydning for skaden	[ ] Annet

Øyenvitner

Årsaksforhold

Hva var årsaken til hendelsen? Nedföringsfestet ble flyttet. Det dryssed ned stöv. Det er ikke båbud om briller.

Tiltak

Hva er/vil bli gjort i avdelingen for å forebygge lignende? Det må brukes briller under denne arbeidsopprasjonen.

Underskrift

20.2.95 — Dato — Arbeidsleder

20.2.95 — Dato — Verneombud

For vernetjenesten

Fraværstidsrom	F.o.m.	T.o.m.	Fraværsdager
			0

1665 KT 8.91 2000 x 6

Dato 01.03.95

APP.4

Hendelser i februar

0 skader m/favær
1 skade u/fravær
1 materiell skade
3 tilløp

Skims har falt fra krane den 6/2 og 7/2.

Årsak: Boltene på girkassen var løsnet og skimsene løsnet og falt ned.

Tiltak: Det innføres ukentlig kontroll, sjekklise utarbeides i sammarbeid med kranverksted.

Operatør fikk støv/skitt i øyne ved nedføringsfeste. dato: 17/2

Årsak:Nedføringsfestet ble flyttet.Det drysset ned støv.(Det var ikke påbud om briller).

Tiltak: Ved flytting av nedføringsfester må det brukes briller.

Hendelser i mars

30.03.95 Dordelen av et H-verktøy falt i gulv
Årsak:Det var ubalanse i dor-delen og den falt ut av skrustikken
Tiltak: Alt arbeid på 510 mm dor-deler skal gjøres i sveise/ frese bu

29.03.95 Når operatør skulle ta ut verktøy fra ovn,falt backer ut av verktøyringen
Årsak: Det manglet kile i ring.
Tiltak: Ringer må sjekkes når de monteres

23.03.95 Prøvebit falt ned fra korg under transport
Årsak:Prøvebit var rørformet og trillet av
Tiltak: Prøvene legges på langs i korg og stemples av

15.03.95 Strø falt ned fra korg under transport med krane
Årsak: Løse strø lå i bunn på korg
Tiltak: Strø må festes i korgene

APP.5.

Vår dato/*Our date* Vår referanse/*Our reference*

Deres dato/Your date Dato 060494 *Deres referanse/Your reference*

HMS - rapport

Måned / År : **03 / 94.**

Til : Verksdirektør

Kopi: M.& S.- seksjon

	Siste måned	Hittil i år
Skader m / fravær	0	1
Skader u / fravær	2	4
Materielle skader	4	7
Tilløp til skader	0	5
H - verdi	0	20,7
F - verdi	0	

NB. En skade reg. uten fravær i februar er omgjort til skade med fravær som det fremgår i akkumlert hitill i år.

APP.5.

Dato 040594.

HMS - rapport

Måned / År : **04 / 94.**

Til : Verksdirektør

Kopi: M.& S.- seksjon

	Siste måned	Hittil i år
Skader m / fravær	0	1
Skader u / fravær	2	6
Materielle skader	0	7
Tilløp til skader	1	6
H - verdi	0	15,3
F - verdi	0	

Aldersbolt
65340 Hemn

APP.5.

HMS - rapport

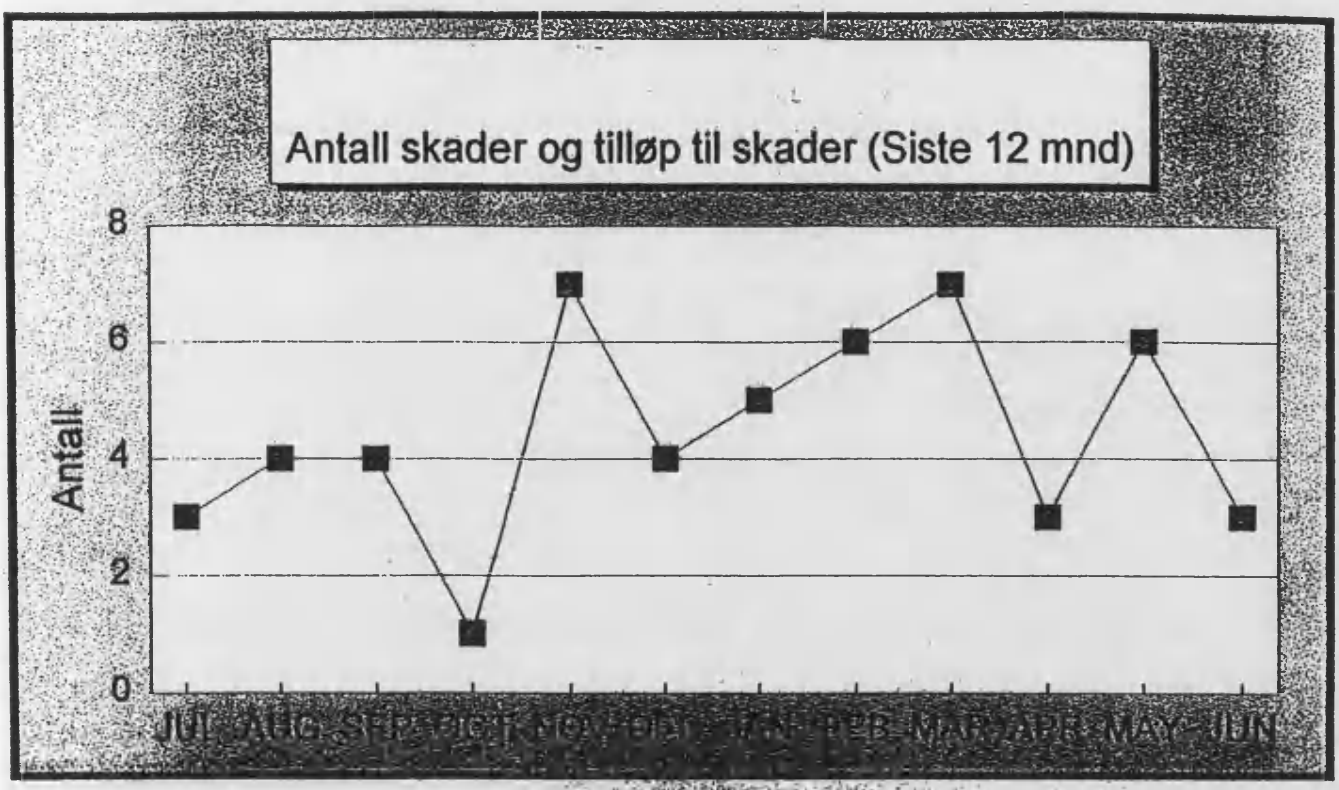
Måned / År :10.95.

Til: Verksdirektør
Direktør
Plassjef

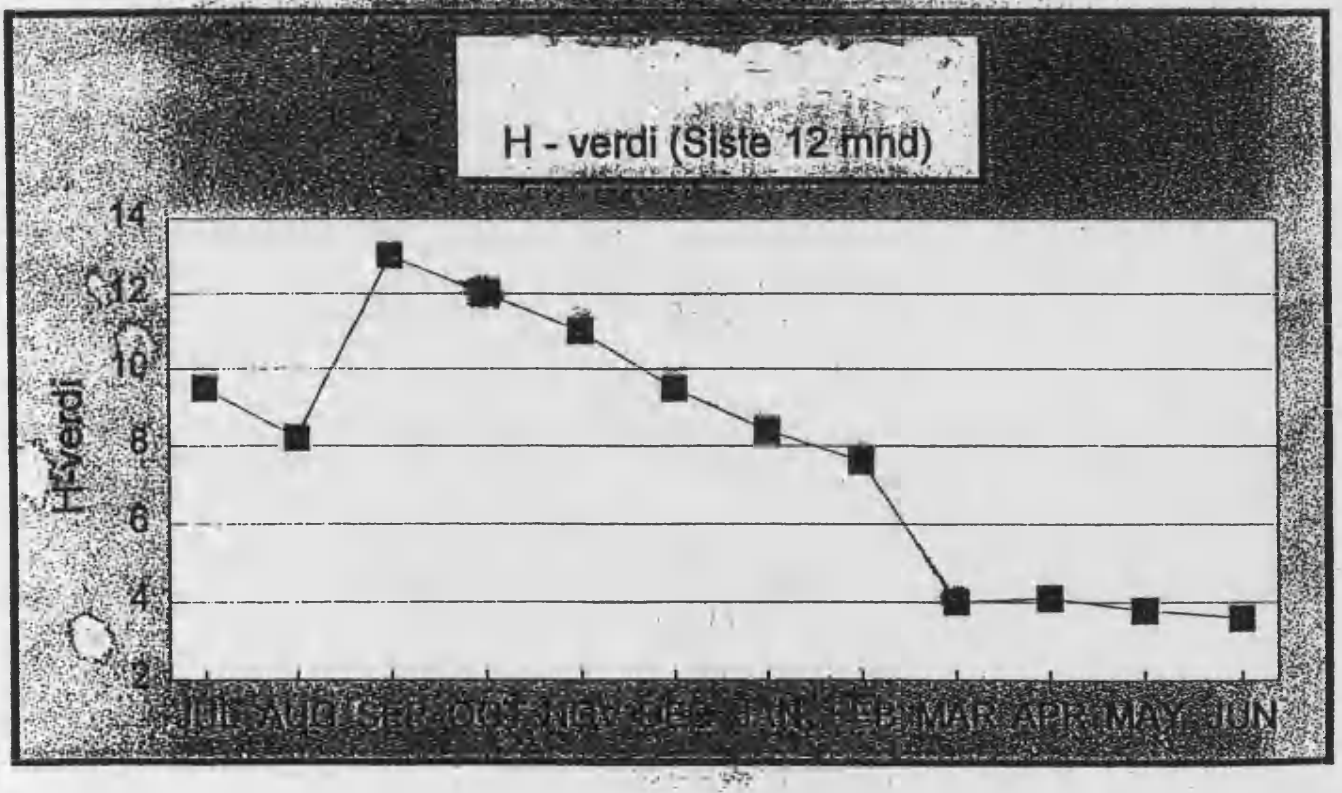
Kopi: M&S - seksjon v/ Vernesjef

	Siste måned	Hittil i år
Skader m/fravær	0	1
" u/ fravær	1	13
Materielle skader	1	9
Tilløp til skade	2	31
H - verdi	0	5,5

Dato for siste skade m/fravær 21.08.95



Siste skade med fravær: 2/9-94



APP. 7.

Acc. 1993		Acc. 1994		Acc. 1995	
H-verdi	10,5	H-verdi	9,5	H-verdi	5,5
F-verdi	165	F-verdi	191	F-verdi	22,4

	Skader m/fravær	Skader u/fravær	Tilløp/Farlige handlinger		
Sept.	1	1	2		
Okt.	0	0	1		
Nov.	0	3	4		
Des.	0	0	4		
~~Acc. 94.~~	~~2~~	~~17~~	~~22~~	Matriell	14
1995					
Jan.	0	2	3		
Feb.	0	1	5		
Mars	0	1	6		
April	0	0	3		
Mai	0	2	4		
Juni	0	1	2		
Juli	0	0	1		
aug.	1	3	1		
sept.	0	2	4		
okt.	0	1	2		
Sum	1	13	31	Materiell	9

APP. 8.

Status pr. 03.11.95, Skade årsaker og antall.

Skader m/fravær	
Leddbånd strukket	1
Skader u/fravær	
Etse skade i ansikt,øye	2
Skrubbsår på leggen	1
Brannsår på underarm	1
Lite kutt i "	1
Støv i øyne	1
Pekefinger i klemme	2
Langfinger i klemme	1
Tommelfinger i klemme	2
Kutt i venstre lår	1
Kutt i hånd	1
sum	**13**

Tilløp	
Verktøy i gulv	2
Profil falt på vrist	2
Strø falt fra korg under transport	1
Prøver falt ut av korg under transport	2
Skimms fra kran-motor funnet på gulv	1
Kolli falt av UK trailer under lasting	1
Hjul falt av tralle	1
Lett slag i ansiktet	1
wire defekt på kran i anod.	1
Plater falt fra tak utvendi	1
Backer falt ut av verktøyring (manglet kile i ring)	1
Puller 2 i retur med profil	3
Kjetting slittnet under oppkjøring av verkt.korg.	1
Under lasting av trailer sneiet kolliet borti operatør som pakket	1
Sagspon fra puller nær øye	1
Nitrogen ut i rommet	1
Slag på pekefinger	1
Grabben var ikke i inngrep på låsekant i korg	1
Stabel av profilskrap falt av krakkene	1
Sylinderfeste for klamp på puller 2 brekt av	1
Plast strappeband røk	1
Bryter på fjernkontroll hengte seg opp	1
Sykkel tippet med prøvebiter til Lab.	1

Snubblet p.g.a. rot på gulv	1
Snubblet i korg og falt i gulvet	1
Operatør traff kolli med skulder	1
sum	31

Materielle skader

Avtrekkshette falt ned fra tak i anodisering	1
Palle falt av truck	1
Hull i støyvegg	1
Bøyd lysbjelke og knust refleks på trailer(U.K.)	1
Bøyd stag på kranbomm	1
Puller 2 i retur(sikkringskap ødelagt)	1
Tablå for kran smeltet	1
Profiler falt i gulv	1
Kjetting på skrev ble slitt av	1
sum	9

APPENDIX 9 – EXTRACTS OF FIELD DIARY

Monday September 4, 1995:

"I talked to x who has injured his ankle, and he is now on crutches, working in the drawing room. X says the injury was worse than first believed. He takes off his sock and shows me the ankle which still is swollen. He has been told to try avoiding using his foot.

While I sat writing, x arrived and invited me to his shift's celebration of seven years without injuries. That was nice and suited me well since I was very tired in my head of listening to tapes. The whole shift was present and some of the managers as well. We were served good sandwiches, fruit, coffee and soft drinks. It was almost embarrassing, as manager x talked a lot, while most of the workers said next to nothing.

The managers gave small speeches and flowers were given to all workers – x congratulated them of the good safety results and said he appreciated the firm hand of the shift safety representative who stopped the work process a couple of weeks ago due to an oil leak – which immediately after that was taken care of. X also said that everyone should be proud to work at this shift – and that he believed that most people were.

Then x said a few words. He wished all the best for the future, and hoped the shift will continue to go on without injuries. He said that even though he ought not to say so, he believes that all injuries cannot be avoided, and that it is permitted to be on sich leave stay if one becomes injured. I think this is an important signal to the workers, and x looks like he appreciates to hear it. X is as always more humanly oriented in his words than x. He says he is proud that the situation is different han in the 1980s, that the equipment is much the same, but the workers are much more competent now, both regarding their safety attitudes and their general work competence.

There is a lot of food left over, and we put it into the refrigerator for tomorrow. X's injury in 1988/89 is mentioned, and x says this was a "border case" – an injured foot and he was not on sick leave due to his upcoming vacation – that was why it was not registered in the reports as it perhaps should have been.

X says that management does not want to hear so much about this episode – he found it okay himself that it was not properly reported since he was due for vacation. He also says that there is a hysterical trend concerning the statistics – it has become the most important issue, it has become too much, he says.

Outside the shift room, x says that he expected x to bring up the H- and F-values. He told the story of when x was at a meeting and had said: "I am not the smartest guy in the world, but neither am I a complete idiot – but I do not have a clue about these H-values or what you call them". X said today that the H-values previously had been around 70, and that seemed to amuse people. They say they do not understand what this is about, and they do not care hearing about them."

Tuesday October 3, 1995:

"I was picked up by x this morning – he had looked for me yesterday morning as well. X came with the key – they are so considerate.

Lunch break with x and x. We talked about a lot of things – alcohol problems at work – safety statistics – dangerous medication, the union has brought up the issue with management – the fact that people are different and have to be treated differently – the labels of the bicycle helmets that had to be removed because of x's injury.

X says once again that work here is very monotonous and that social relations are important in order to make it bearable. And maybe to be in the packing department is the most monotonous work of all? They mention x who is a very smart guy and is not willing to do anything else than this job, and that there are people who are satisfied with such a situation.

X says he has become much more safety conscious at home as well due to his work here."

Thursday November 9, 1995:

"I have got appointments for next week with all members of the x-shift except for two of them who had a break. I have just counted – so far I have interviewed 64 workers. Shift supervisor x is very accomodating as I had believed he would be.

Small talk with x and x – they talk about how many new and young employees which have come here during the last couple of years.

I can see the end of my field work now – which is good, although I will miss bitterly the social atmosphere which I have found here. I do not find so much of that at my own place of work. It is rather curious that I had to go to an industrial site to find the "human touch".

I met x, he has been on a trip with one of the shifts. They were interviewed by the plant newsletter, and he was surprised that they talked so nicely about their place of work. But things are rolling now, he says, good bonuses and good profits."

Tuesday December 5, 1995.

"Quarrel at x-shift in the coffee break – a person had stored profiles irregularly – if there had been a safety inspection, they would have been in trouble, some say.

They complain about the maintenance department – something about a saw that needs repairing and nothing happens – this seems to be the day when everybody complains and quarrels.

I caught a glimpse of the plant safety representative here today – it is the first time I have seen him here.

X from maintenance has been here and due to a leakage, both he and x got some dangerous liquid on their hands. "Good luck that it didn't got into our eyes", they say. I doubt if it is reported.

X tells me about some instances of writing on the toilet walls where named persons have been commented upon.

Talked with x and x and they were occupied with how fine things are productionwise and safetywise. X says that even though things are more speeded up now then previously, people are more safety conscious. X talks about x's injury – that other injured people have been given new job tasks – that MAIE management is too honest, they produce too honest safety statistics. Safety statistics are difficult to compare with each other, he says."

APPENDIX 10 – TAPES

The interviews are recorded on 61 tapes, all in Norwegian.

When I have quoted directly from them in my text, I have translated the quotations into English.